

ESRD NETWORK 2018 ANNUAL REPORT

ESRD Network 03

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ESRD DEMOGRAPHIC DATA

Quality Insights Renal Network 3 (QIRN3) is pleased to present our 2018 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, Quality Insights holds 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 (<http://factfinder2.census.gov>), 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 6,002 patients receiving dialysis as of December 31, 2018, reflecting a near complete return to the number of patients who had been receiving treatment in Puerto Rico before Hurricane Maria caused almost 600 patients to self-evacuate to the mainland US in late 2017. The 6,002 patients receiving dialysis in Puerto Rico 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 2018 Annual Facility Survey performed by QIRN3, dialysis units in New Jersey treated an average of 77.2 patients in each dialysis unit in 2018, and Puerto Rico treated an average of 117.7 patients in each unit, compared to an average of 66.9 nationwide. The US Virgin Islands (USVI) treated an average of 48 patients in each of its 4 dialysis units in 2018.

As shown in Figure 1, as of December 31, 2018, there were 19,173 patients receiving treatment in dialysis facilities in the Network 3 service area, and an additional 1,601 patients receiving treatment in their homes. This total of 20,774 patients receiving dialysis, plus an additional 5,491 patients living with a functioning kidney transplant in the Network 3 service area brings the total ESRD patient count for this area to 26,265.

The number of ESRD facilities in the Network 3 service area, by treatment modalities offered, is shown in Figure 2. As of December 31, 2018 there were 4 transplant centers, 145 dialysis centers offering both

in-center dialysis and home dialysis support, 94 dialysis centers offering in-center dialysis only, and 2 dilaysis centers offering home dialysis support only, for a total of 241 dialysis centers and 245 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, 2018 by Treatment Modality

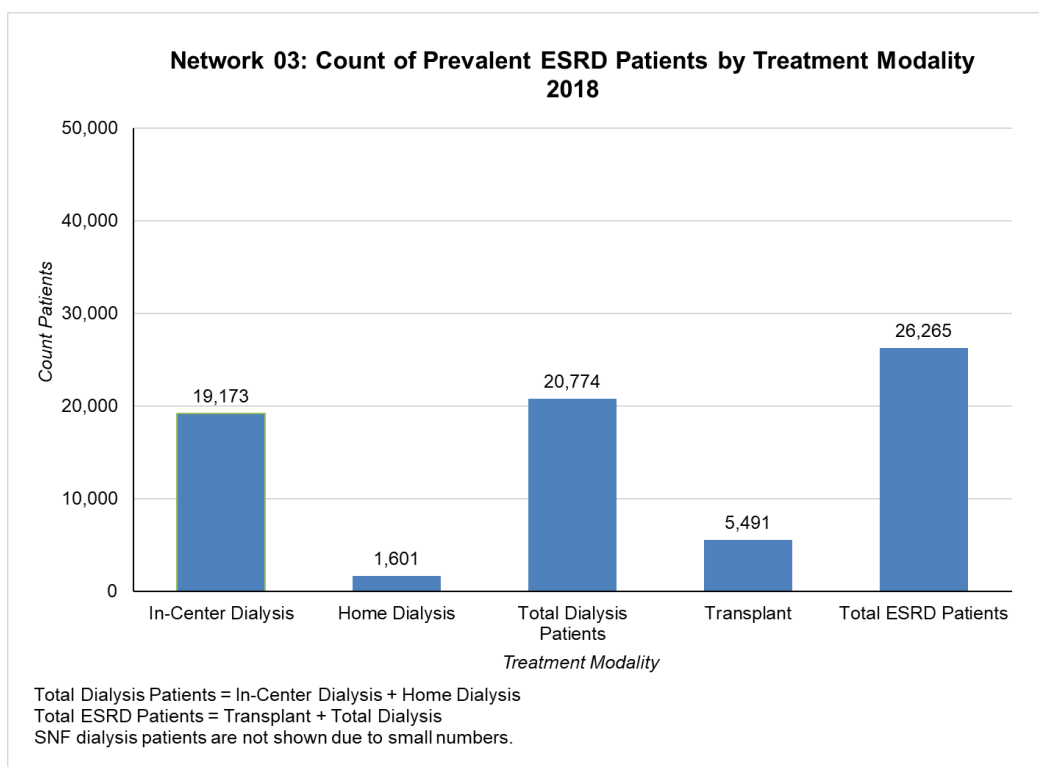


Figure 2 -Number of Facilities in the Network 3 Service Area by Modality Offered as of 12/31/2018

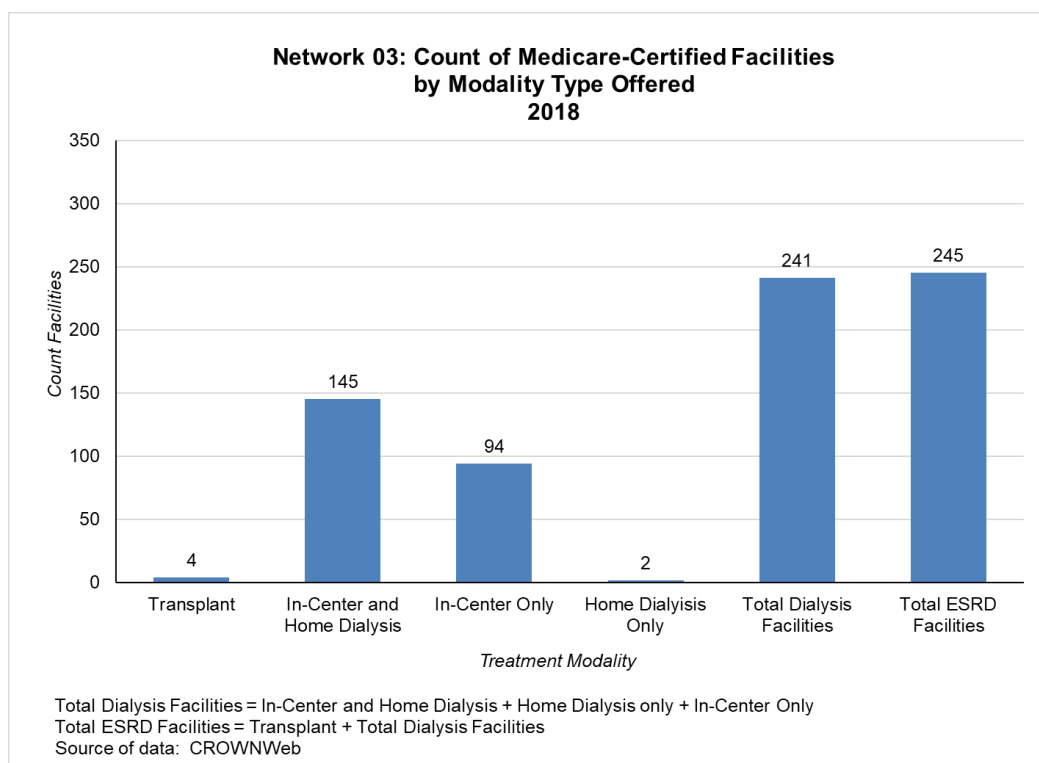


Figure 3 - Percent of Dialysis Patients in each Network Service Area as of 12/31/2018

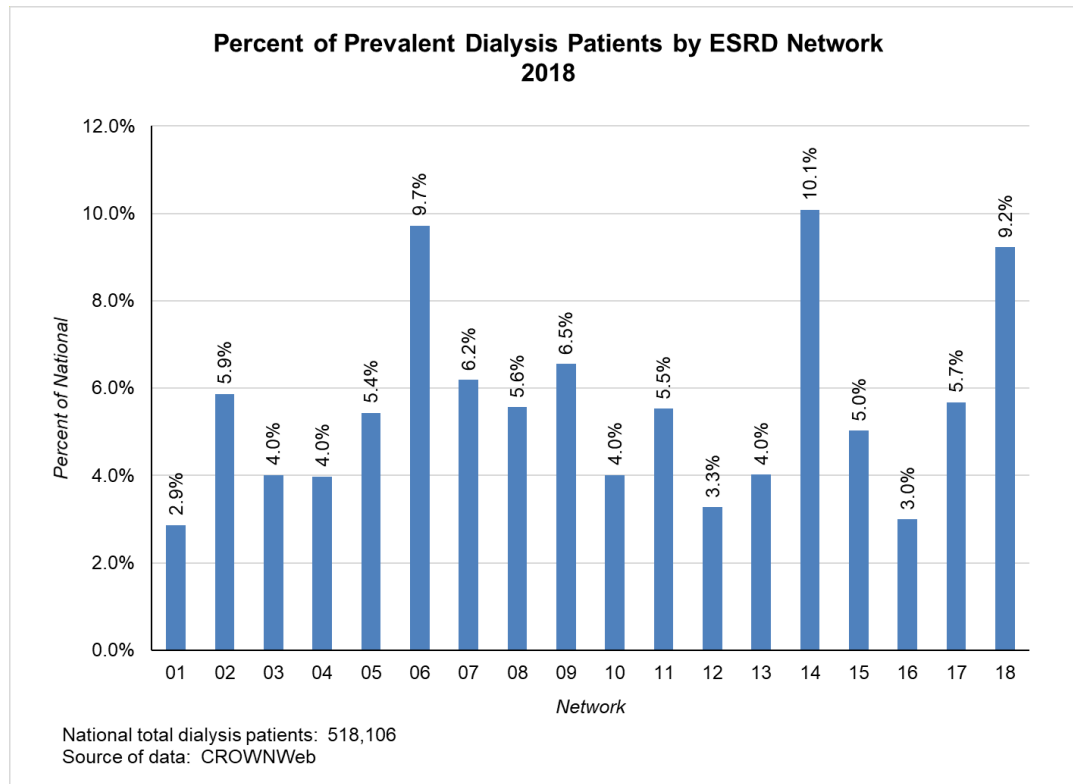


Figure 4 - Percent of National Total Dialysis Facilities Located in Each Network Service Area as of 12/31/2018

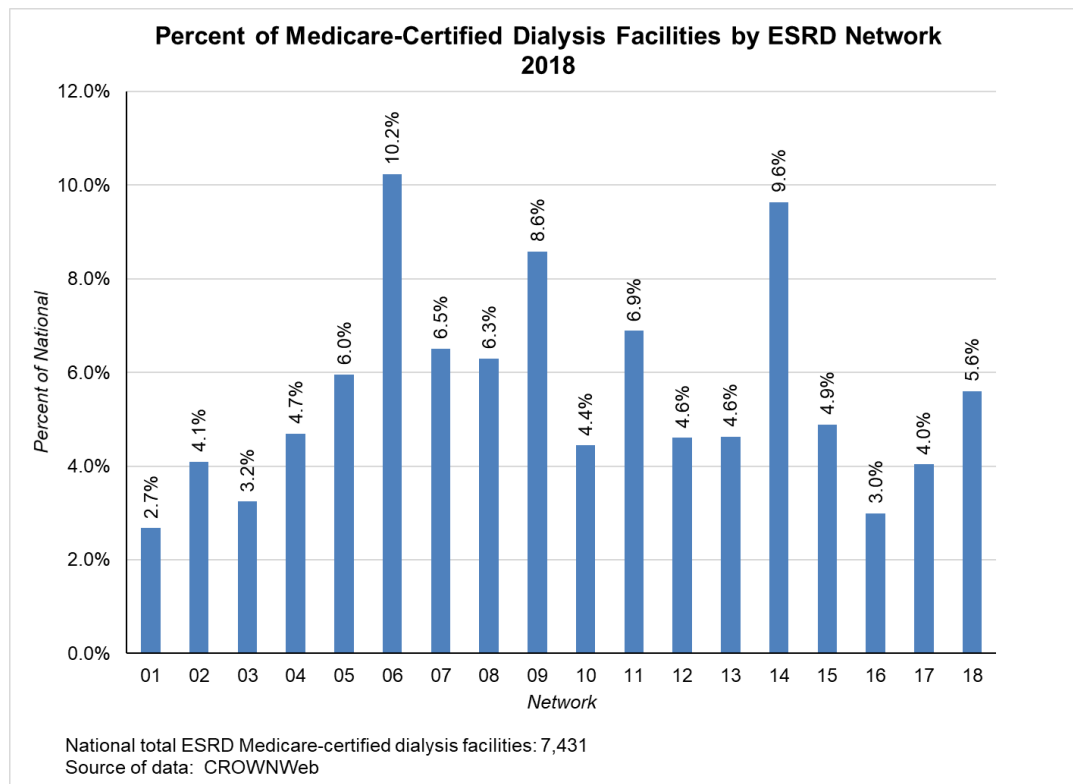


Figure 5 - Percent of National Home Dialysis Patient Population Treated in Each Network Service Area as of 12/31/2018

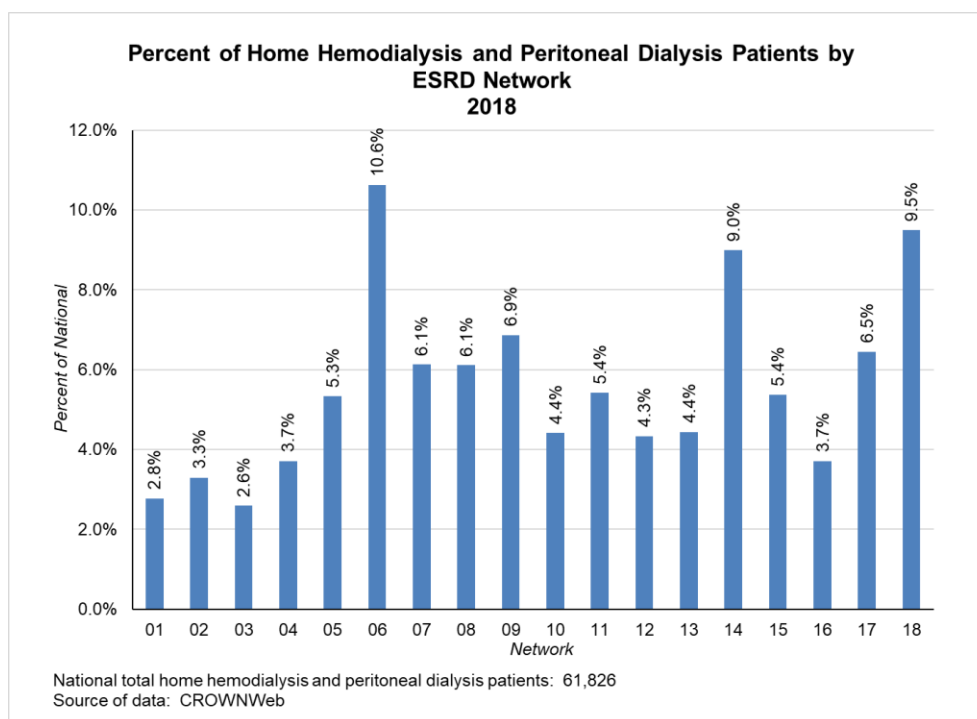


Figure 6 - Percent of National Transplant Patient Population in Each Network Service Area as of 12/31/2018

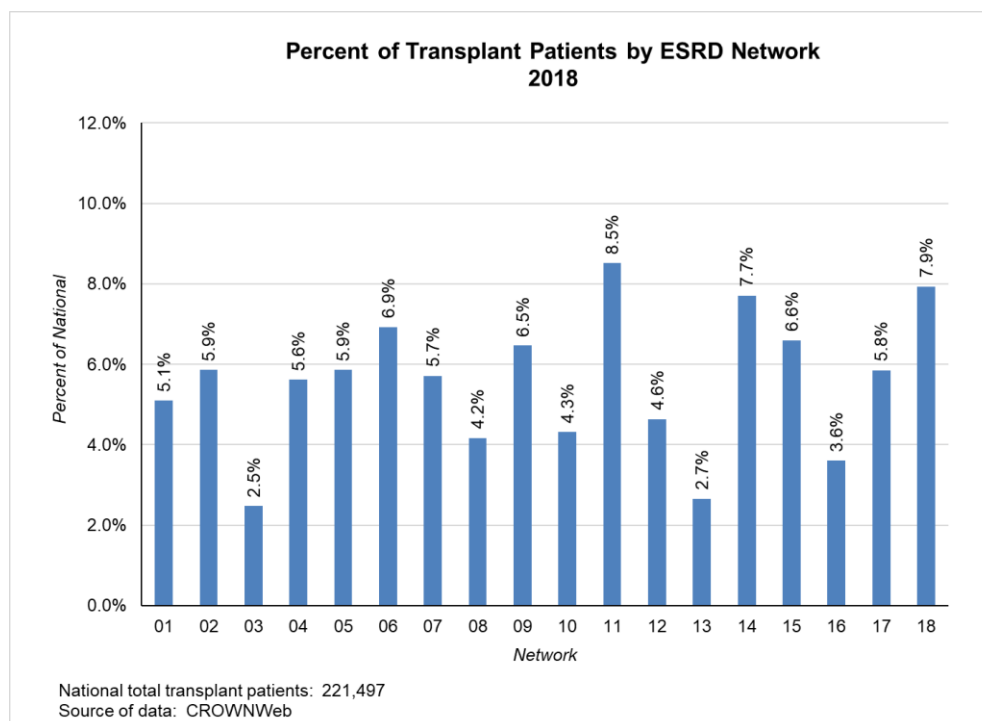
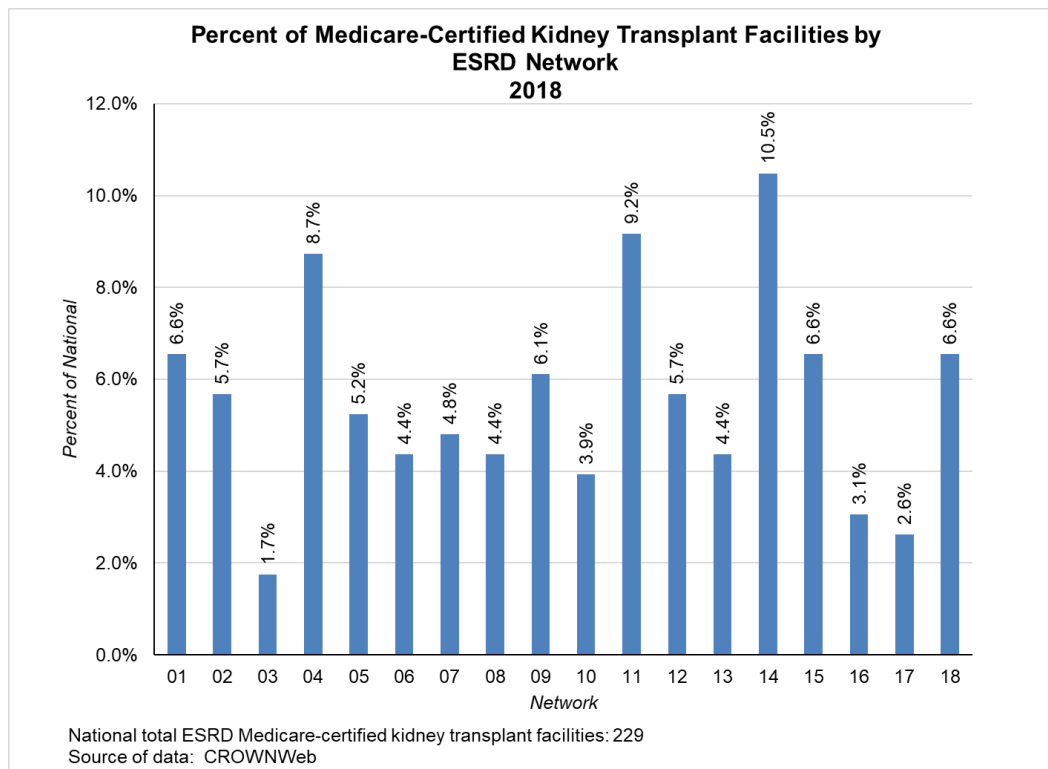


Figure 7 - Percent of National Total Transplant Centers in Each Network Service Area as of 12/31/2018





ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

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 outlines these rights. We mailed these flyers to each dialysis facility in August 2018 and required that they attest to distribution to all their patients. This ensured that each dialysis patient was educated in 2018 on their right to file grievances. We also provided information about filing grievances in our Patient Advisory Committee newsletters three times in 2018. 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 48 calls during which we could provide immediate advocacy in 2018. These cases included treatment related/quality of care issues, staff related issues, and physical environment concerns.

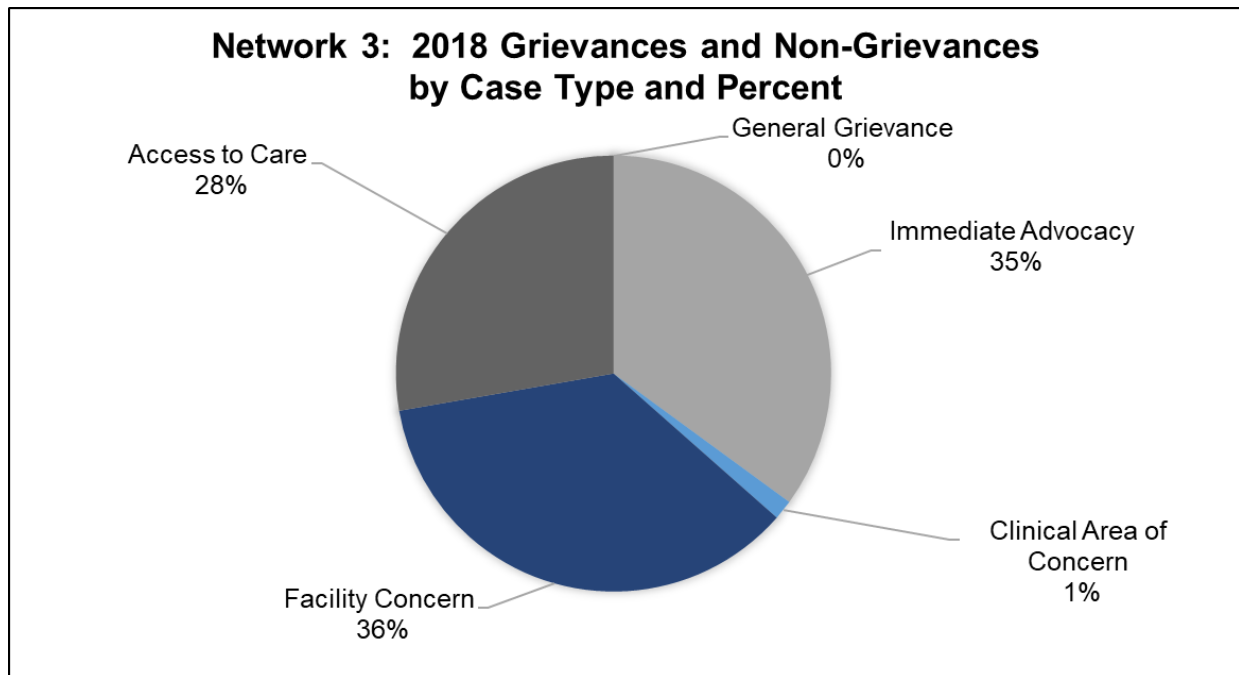
We also investigated two Clinical Quality of Care cases filed by patients in 2018. These cases required the review of medical records by a Registered Nurse. Each case resulted in recommendations for the staff with regard to appropriate care of the patients. These cases were also teaching opportunities for the staff that ultimately impacted the well-being of all patients at these two facilities.

QIRN3 is also responsible for addressing Access to Care cases with our providers. In 2018 we had 35 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 five IVDs, five IVTs and 25 At-Risk cases. Of the 25 At-Risk cases, 23 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 intervention early on helps the facility staff find alternatives that help reduce the need for discharges. In 2018, we fielded 49 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 2018, these interventions have been successful in maintaining at-risk patients in their facilities.

Figure 8 - Types of Grievances and Non-Grievances Received by QIRN3 in 2018



Source of data: Patient Contact Utility (PCU)



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) 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.

Results: As shown in Figure 9, at the conclusion of this QIA, participating facilities achieved a 4.0 percentage point reduction in their aggregate long term catheter rate.

Puerto Rico and US Virgin Island facilities were excluded from participation due to the ongoing recovery from the 2017 hurricanes.

Interventions

- Facilities were required to assess and improve facility practices for education, referral, and assistance to patients with catheters.
- Using the Institute for Healthcare Improvement 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 facilities' monthly Plan, Do, Study, and Act (PDSA) cycles.
- We promoted the Fistula First Catheter Last (FFCL) Change Concepts and the Lifeline for a Lifetime resources and developed a bundle facilities could use to address:
 1. Initiation and Continuity of a Process to remove catheters and begin using a permanent access
 2. Timely Creation of a Vascular Access Plan
 3. Designated Vascular Access Manager
 4. Routine Meetings with the Facility Interdisciplinary Team
 5. Patient and Staff Education
 6. Celebrating Success.

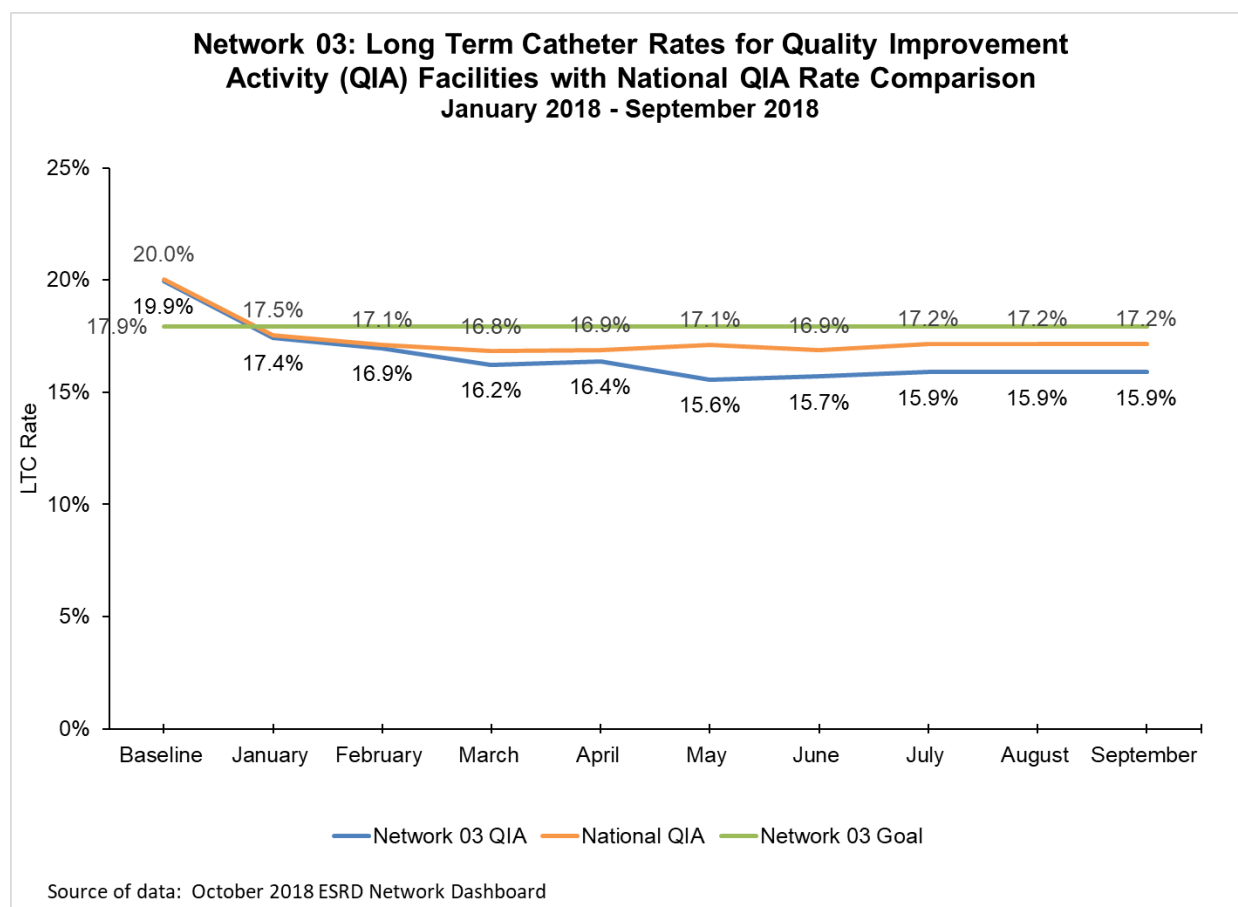
Identified Best Practices

- Regional Vascular Access Coordinators who provide oversight and training to local facility vascular access coordinators.
- Use of clinical support specialists in follow up of vascular access quality improvement.
- Timely education and referral for access evaluation.

Identified Barriers

- Patient refusal or missed appointments.
- Patients with a permanent access refusing to begin the cannulation protocol.
- Patients admitted with only a catheter in place and no plan for a permanent vascular access.

Figure 9 - LTC Rates for Network 3 and National Targeted Dialysis Facilities



Bloodstream Infection Quality Improvement Activity

Goal of QIA: Reduce Dialysis Event rates, specifically bloodstream infection (BSI) rates, and demonstrate a 20 percent or greater reduction in the pooled mean at re-measurement (first and second quarter of 2018) compared to the baseline (first and second quarter of 2017).

Results: As shown in Figure 10 below, at the conclusion of this project, the goal of 20 percent reduction was achieved. Additionally, as shown in Figure 11, by September 30, 99% of dialysis facilities in the Network 3 service area had at least one person who completed the CDC's National Healthcare Surveillance Network (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, 27% of dialysis facilities in this project had gained access to a hospital electronic medical record (EMR) or to a regional or national health information exchange (HIE), as shown in Figure 12. The CDC believes that this access will allow dialysis facilities to capture infections that are identified during a hospitalization and report them to NHSN.

Interventions

We used an 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, Network Subject Matter Experts (SMEs).

Focus facilities were educated and supported through the implementation of the Centers for Disease Control and Prevention (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. Facility visits were conducted for facilities with low rates of adherence to CDC recommendations and upon request for technical assistance.

Identified Best Practices

- Changing of the culture of safety in the facility by engaging the team and improving adherence to infection prevention practices.
- Engaging 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 are challenged with patients admitted from other facilities 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.
- Facilities are responsible for reporting positive blood cultures drawn on the date of admission into the facility. These are community-acquired but are counted against the facility for purposes of QIA evaluation as well as the CMS ESRD Quality Incentive Program.

In addition to the activities above, an educational campaign was implemented with Puerto Rico and US Virgin Island facilities.

Goal: This campaign aimed to impact at least 50% of the Puerto Rico and USVI ESRD hemodialysis patient population. The goal was that 20% of patients would present a follow up question to facility staff after reading the Conversation Starter tool.

The Centers for Disease Control and Prevention's (CDC) Making Dialysis Safer Coalition tool titled Conversation Starter to Prevent Infections in Hemodialysis was used. It was translated to Spanish for the patients in Puerto Rico.

The tool includes questions and answers about different infection prevention topics. These include:

- Patient Engagement in Infection Control
- Vaccinations
- Hepatitis Testing
- Medication Preparation
- Use of CDC Recommendations
- Disinfection of Dialysis Stations
- Dialyzer Reuse
- Vascular Access Options
- Outbreak Management.

We developed accompanying pledge cards for patients to identify the topics they wanted to have a conversation with the staff about and by which they pledged that they would encourage other patients to start a conversation about infection prevention.

Results:

The Conversation Starter tool was provided to 3166 patients (60.4% of the 5,241 dialysis patients in PR and USVI).

Of the patients who received the Conversation Starter tool, 80% (2543) returned the pledge card with at least one topic selected for further discussion.

The topics that yielded most interest were: Patient Engagement in Infection Control, Vaccinations, and Disinfection of the Dialysis Station.

Figure 10 - Number of BSIs to be Reduced Compared to Total Reduced in Network 3 Target Facilities

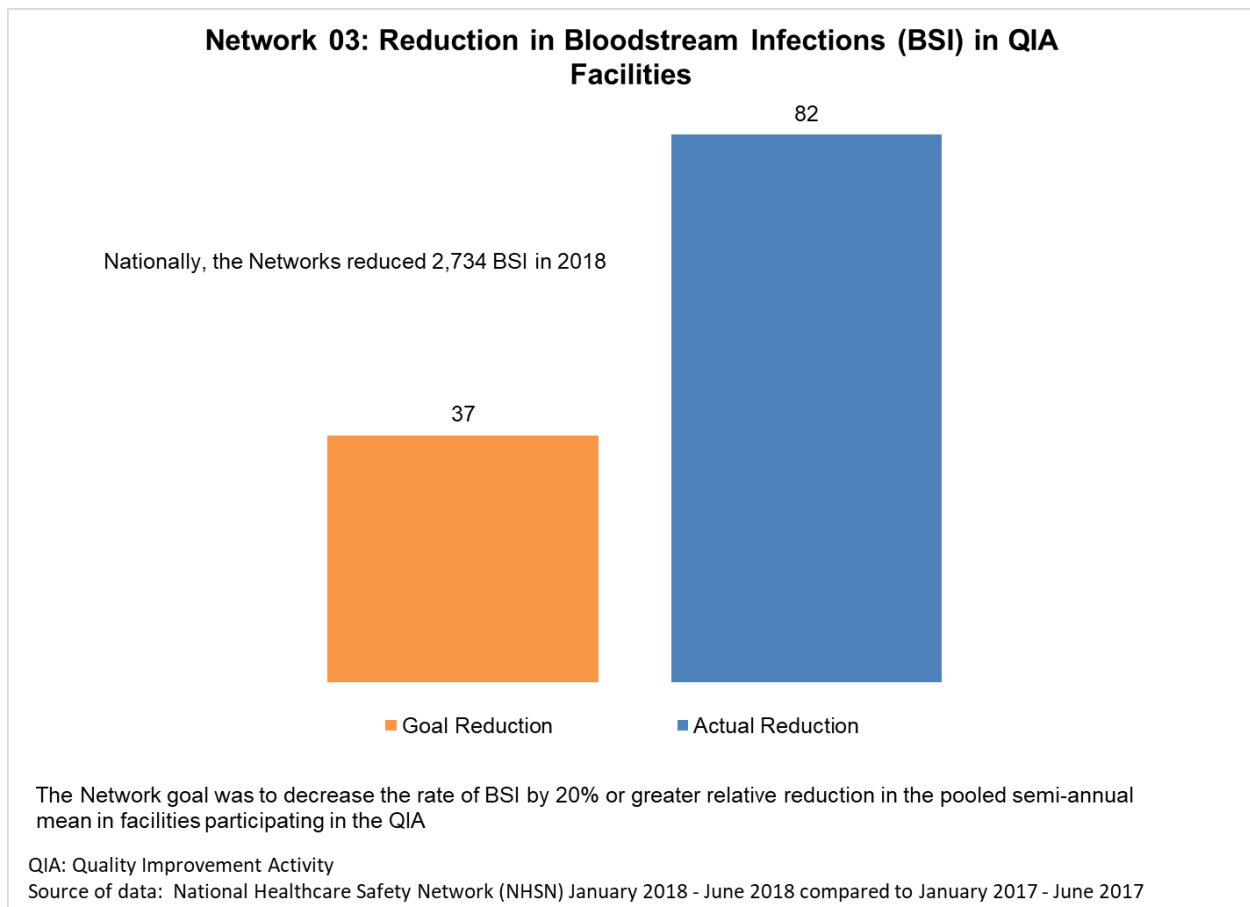


Figure 11 - Percent of Facilities in the Network 3 Service Area That Had One Staff Person Complete NHSN Training

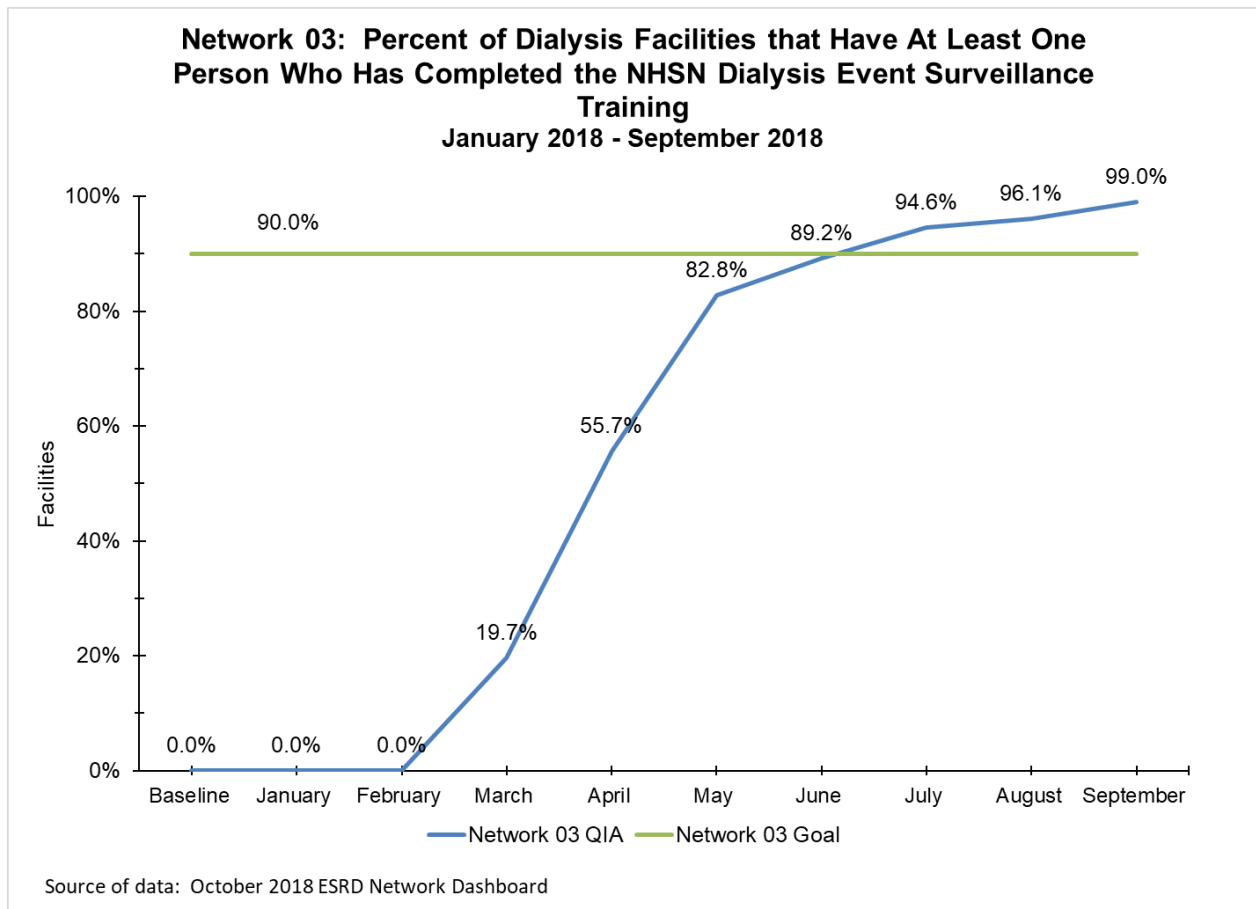
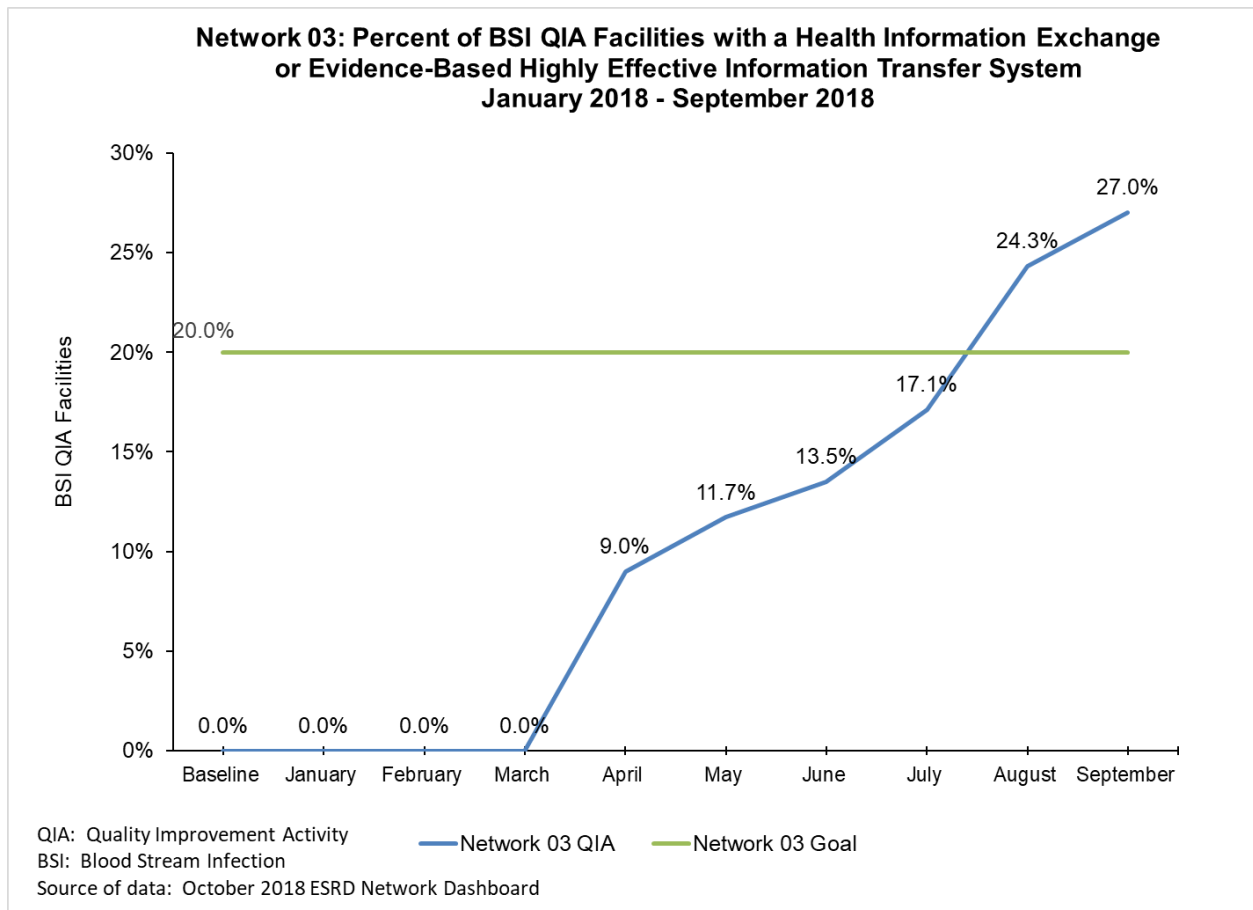


Figure 12 - Percent of Focus Facilities with Access to a Hospital's Electronic Medical Record (EMR) or a Regional or National Health Information Exchange (HIE)



Transplant Waitlist Quality Improvement Activity

Sixty-seven facilities were engaged in the project to evaluate and improve their transplant-related processes with the goal of improving transplant waitlisting through identification of barriers to patients' progress through the seven steps to transplant and deployment of interventions to mitigate.

Goal of QIA: Increase the number of kidney transplant waitlisted patients from 12.21% to 22.21% of 5,672 patients in the target facilities, by September 30, 2018. This represents a ten percentage point increase over the September 2017 baseline in project facilities.

Results:

At the conclusion of this project:

- 1) As shown in Figure 13, the goal of 22.21% waitlisting was not achieved and the rate of patients waitlisted in fact decreased to 11.11% from the baseline of 12.21% during the 9 months of the project.
- 2) None of the 67 project facilities achieved the required 10 percentage point rate increase.

Interventions:

- Stakeholder enlistment –facilities, corporate leadership, Network SMEs and transplant centers
- Education including QIA-focused webinars and a dedicated webpage for staff and patient education, project reporting, and project resources.
- Quality improvement resources for facilities on root cause analysis and PDSA cycles
- Peer mentoring tool for SME use at their facilities to mentor new patients
- Mandatory patient engagement program with webinars, tools, and resources to support Network QIAs
- Monthly collection of facility RCA-PDSA activities and interventions to improve progress toward waitlisting
- Distribution of facility best practices and feedback reports to assist facilities in identifying needs and monitoring progress
- Technical assistance to facilities through Network outreach and facility visitation.

Identified Best Practices:

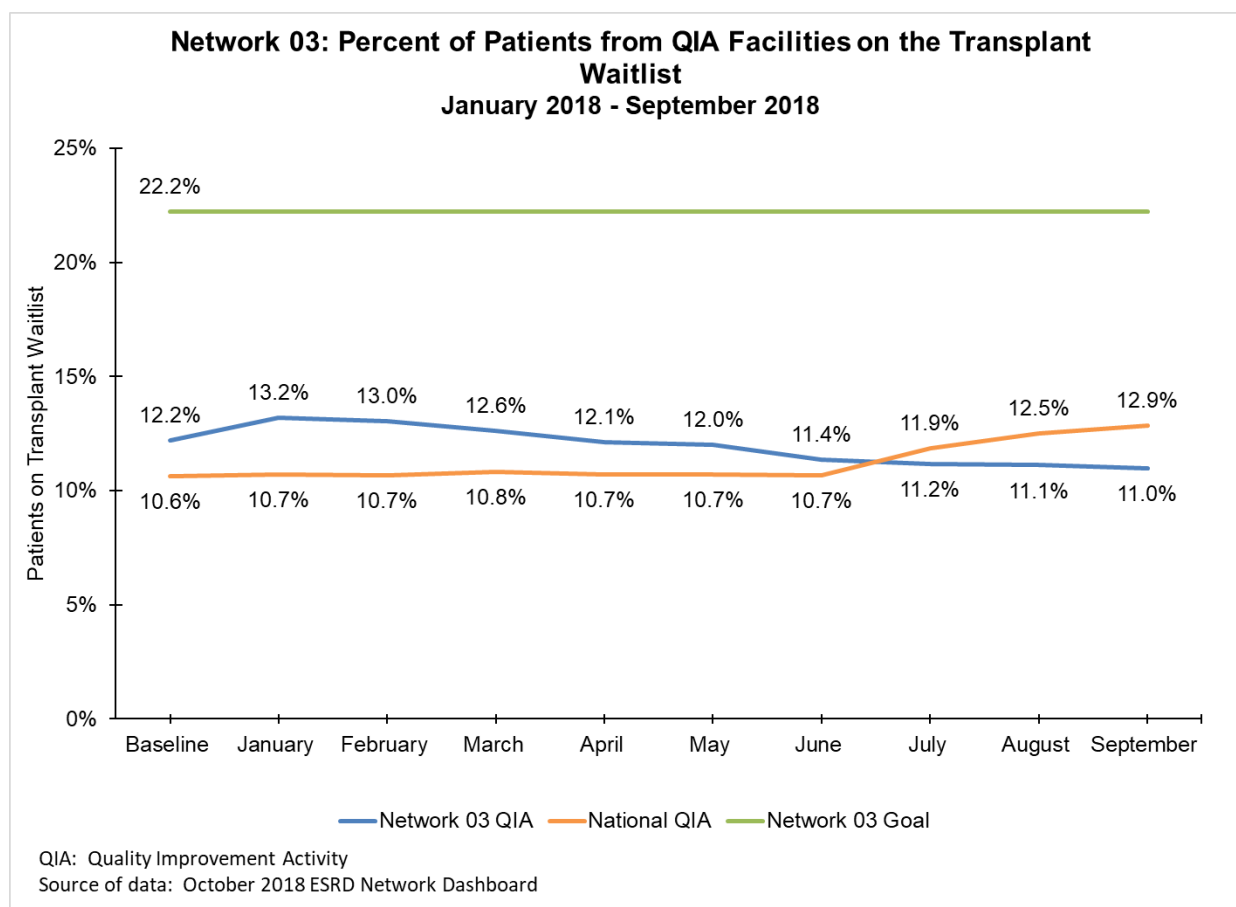
- Education of staff, patients, and families
- Incorporation of SMEs for peer-to-peer discussions
- Regular cycle (weekly or monthly) of referral follow up or “check-up” with patient to facilitate timely assistance with barriers
- Initiate and sustain working relationship with partner transplant centers
- Initiate and sustain a tracking system for better communication.

Identified Barriers:

- There are patient characteristics that dialysis facilities cannot impact, such as lack of insurance, inadequate insurance, deteriorating health status, sustained disinterest, poor or absent follow up with appointments and recommendations. Recommendations may include losing weight, stopping smoking/other substance use, and undergoing required additional testing/treatment resulting from testing outcomes.

- Since the new Kidney Allocation System was introduced in 2014, patients can be waitlisted as of the date of first dialysis, which means transplant centers often defer listing until the patient fulfills all requirements and necessary waiting periods to start the evaluation.
- The wait list rate measurement process for the 2018 QIA did not take into account other factors impacting waitlist removals such as transplantation, death, deterioration in health, and listing at more than one transplant center.

Figure 13 - Percent of Patients on Transplant Waitlist, Network 3 and National Target Facilities



Home Therapy Quality Improvement Activity

Sixty-seven facilities were engaged in the project to evaluate and improve their home dialysis processes with the goal of increasing the percentage of patients using home dialysis through identification of barriers to patients' progress through the seven steps to home dialysis and deployment of interventions to mitigate these barriers.

Goal of QIA: Increase the number of patients utilizing a home dialysis therapy from 0.44% to 10.44% of 5,940 patients in target facilities. This represented a ten percentage point increase from January 2018 through September 2018 over the October 2017 baseline in project facilities.

Results:

At the conclusion of this project:

- 1) As shown in Figure 14, the goal of a 10.44% home dialysis rate was not achieved.
- 2) None of the 67 project facilities achieved the required 10 percentage point rate increase.
- 3) There was steady improvement in the rate of patients receiving training to begin dialysis at home in the project facilities from 0.44% to 3.5% of the target population of 5,940 patients.

Interventions

- Stakeholder enlistment –facilities, corporate leadership, Network SMEs
- Education including QIA focused webinars, dedicated webpage for staff and patient education, project reporting, and project resources.
- Quality improvement resources for facilities on root cause analysis and PDSA cycles
- Peer mentoring tool for SME use at their facilities to mentor new patients
- Mandatory patient engagement program with webinars, tools, and resources to support QIAs
- Monthly collection of facility RCA-PDSA cycles and interventions to improve progress toward wait listing
- Distribution of facility best practices and feedback reports to assist facilities to identify needs and monitor progress
- Technical assistance to facilities through Network outreach and facility visitation

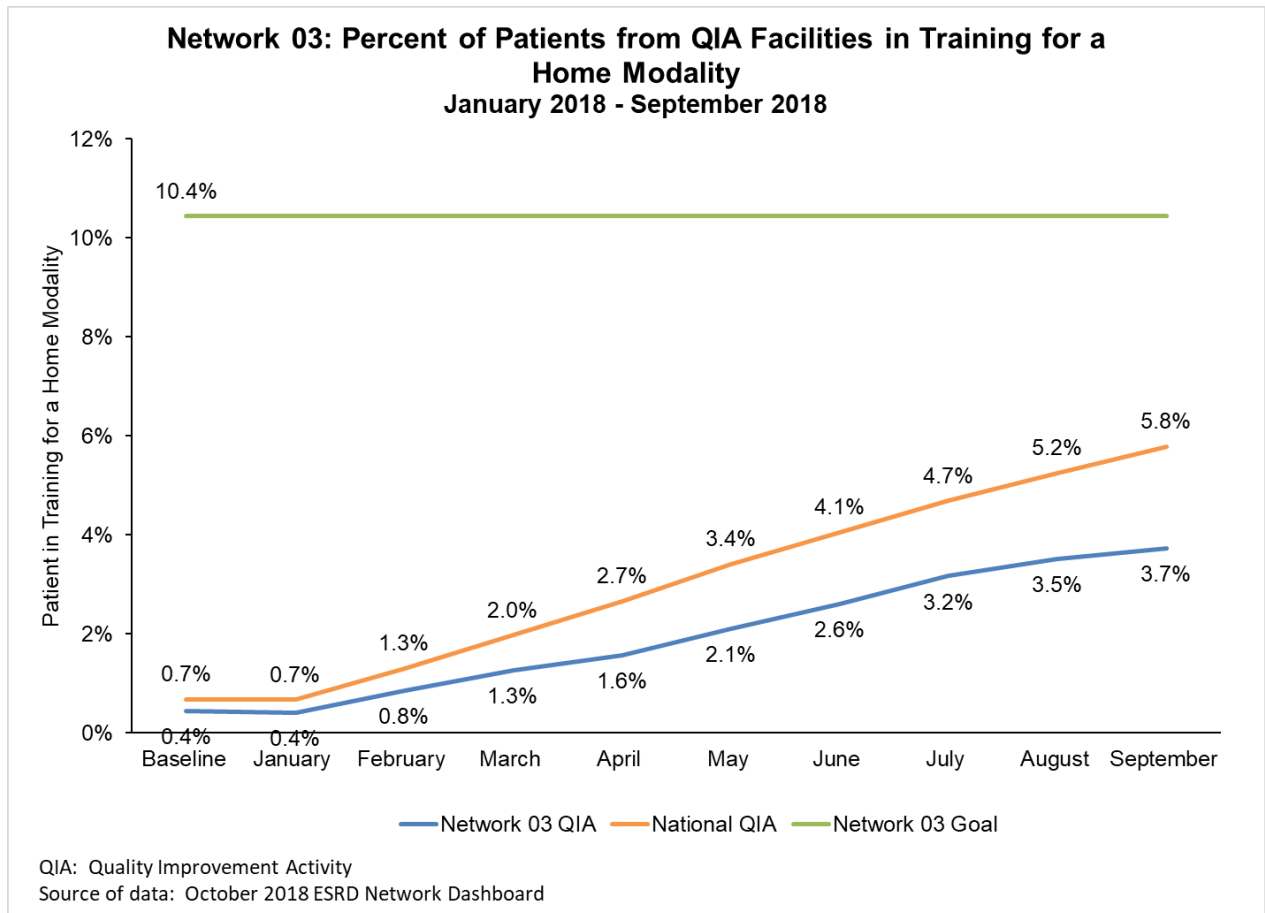
Identified Best Practices

- Education of staff, patients and families
- Use of a dedicated staff (champion or Kidney Care Advocate) to provide education, follow-up and tracking of patients referred for a home modality
- Use of staff huddles to provide staff updates on home dialysis therapies
- Incorporation of SMEs for peer to peer discussions
- Regular cycle (weekly or monthly) of referral follow up or “check-up” with patient or home staff to facilitate timely assistance with barriers
- Initiation of a facility “Experience the Difference Program” in which a facility partners with a home program to offer a two week in-center trial of a home dialysis machine and schedule coupled with intensive patient/family education about home modalities

Identified Barriers

- There are patient characteristics that dialysis facilities cannot impact, such as no insurance, inadequate insurance, poor health status, sustained disinterest, poor or absent follow up with appointments and recommendations.
- Lack of staff education and engagement in modality education and support
- Lack of physician engagement

Figure 14 - Percent of Patients Training for Home Dialysis, Network 3 and National Target Facilities



Population Health Focus Pilot Project Quality Improvement Activity

We chose the Increasing Gainful Employment of ESRD patients for our 2018 Population Health Focused Pilot Quality Improvement Activity. We selected facilities that were hospital-based or independent (i.e. not belonging to a large dialysis corporation). CMS required Networks to select facilities that represented 10% of the dialysis facilities in their Network service area, which resulted in 23 facilities selected for participation. Our facility selection focused solely on New Jersey facilities. CMS required that “The Network shall demonstrate at least a five (5) percentage point increase in referrals to the identified Employment Network (EN) and/or Division of Vocational Rehabilitation (DVR) by September 30th of the contract year. The Network shall demonstrate at least a two (2) percentage point improvement in the number of patients receiving EN and/or VR services in closed CROWNWeb data by September 30th of the contract year.” As shown in Figures 15 and 16, by the end of the project, 23.8% of eligible patients had been referred for services, and 2.6% 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 an educational 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 EN.

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 ENs 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, and 8. Facility staff members were asked to submit their most innovative intervention. The most innovative idea was selected and 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 four Networks. A grand prize was awarded to the winning facility, which used the gift card to purchase an iPad for patient use.

Figure 15 - Percent of Patients Referred for Services, Network 3 and National Target Facilities

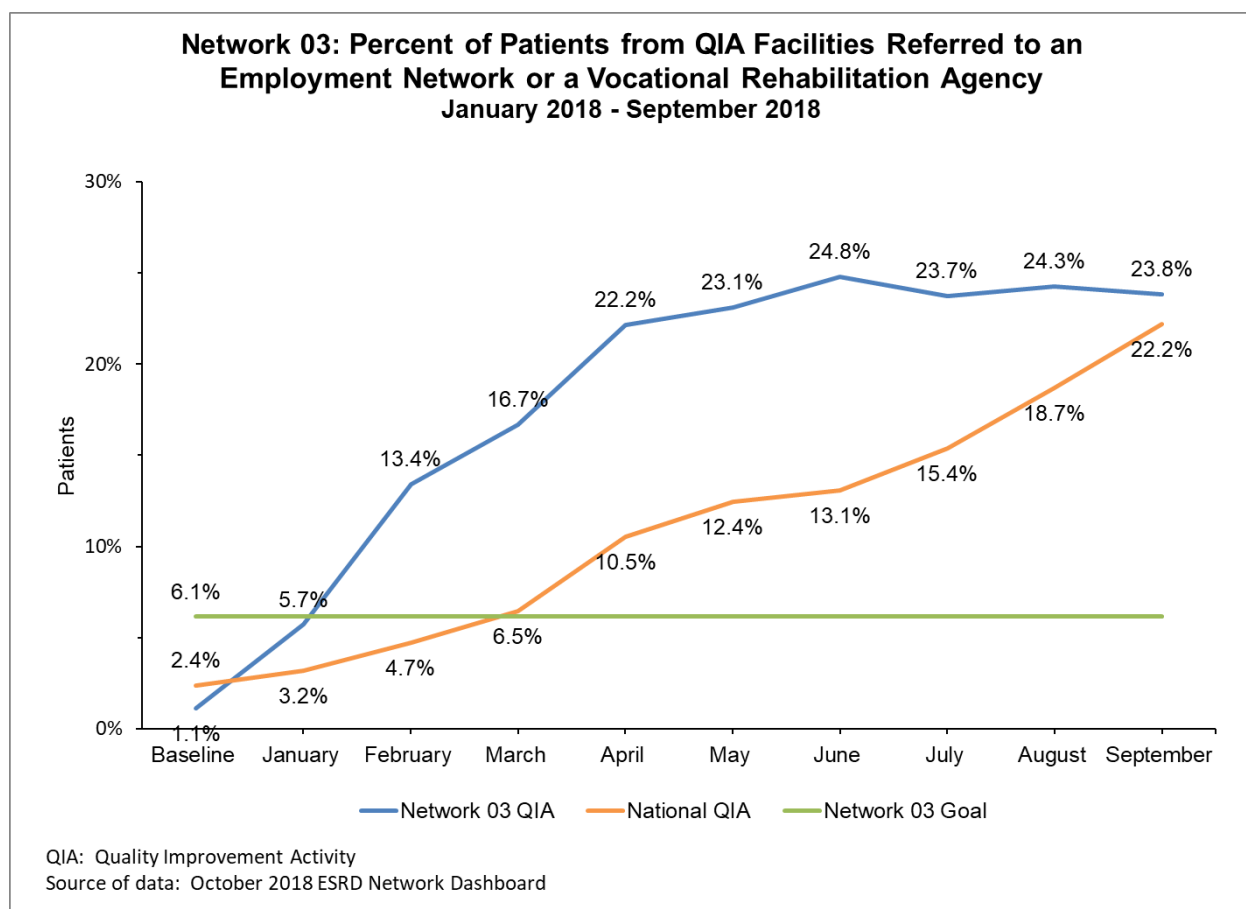
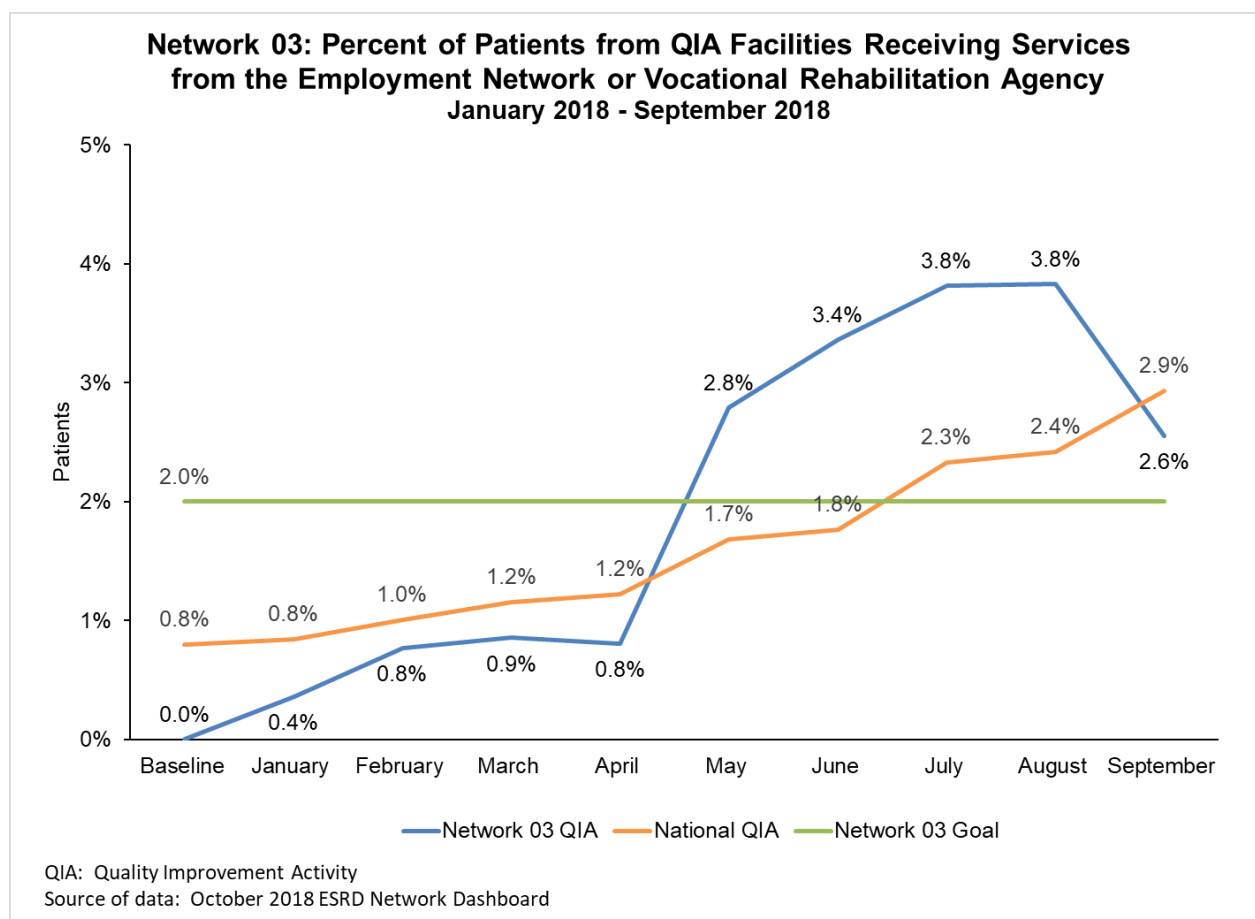
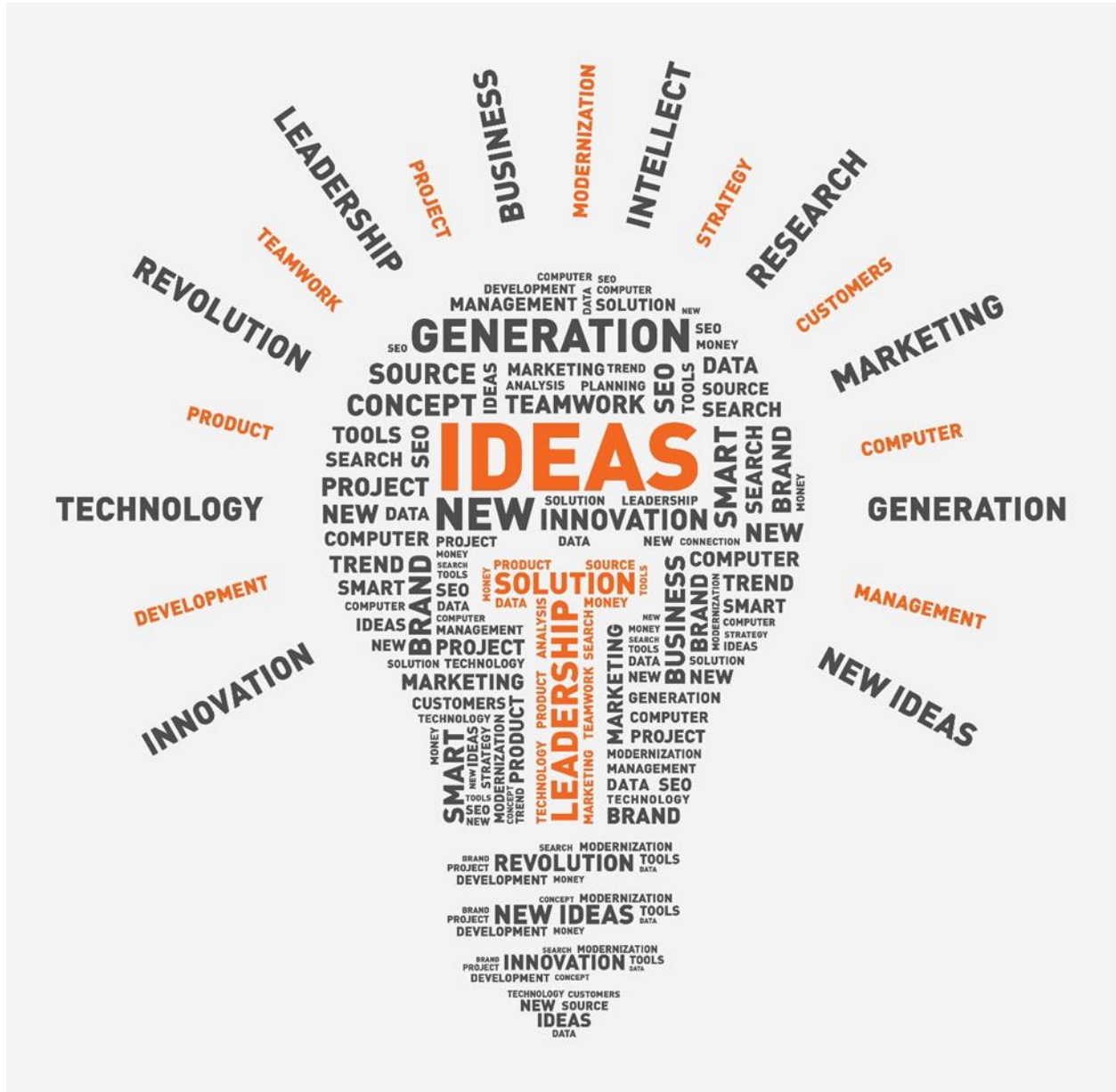


Figure 16 - Percent of Patients Receiving Services, Network 3 and National Target Facilities





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 2018.

Recommendations to CMS for Additional Services or Facilities

We did not recommend any additional services or facilities in 2018. 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

There were no significant emergencies in the Network 3 service area in 2018. Dialysis facilities damaged in 2017 by Hurricanes Irma and Maria in Puerto Rico and the US Virgin Islands continue to recover.

By the end of 2018, all patients evacuated from St. Thomas and St. Croix because of the 2017 hurricanes had returned home.

Two mobile dialysis units with 6 stations in each have been installed on St. Croix to replace the hospital-based dialysis unit destroyed by Hurricane Irma. One mobile dialysis unit with 6 stations has been installed on the Puerto Rican island of Vieques to replace the island health center's dialysis unit that was damaged by Hurricane Maria.

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

Baxter Renal Glossary of Terms Associated with Kidney Disease

<http://www.renalinfo.com/us/resources/glossary/index.html>

NKF Glossary of Terms

<http://www.nkfi.org/education/glossary-of-terms#.VXByf2fbKUk>

FMC Glossary

<http://www.ultracare-dialysis.com/Footer/Glossary.aspx>

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/>