End-Stage Renal Disease
Network of the South Atlantic

2019 Annual Report

Downtown Atlanta, Georgia

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IPRO ESRD Network of the South Atlantic
http://network6.esrd.ipro.org

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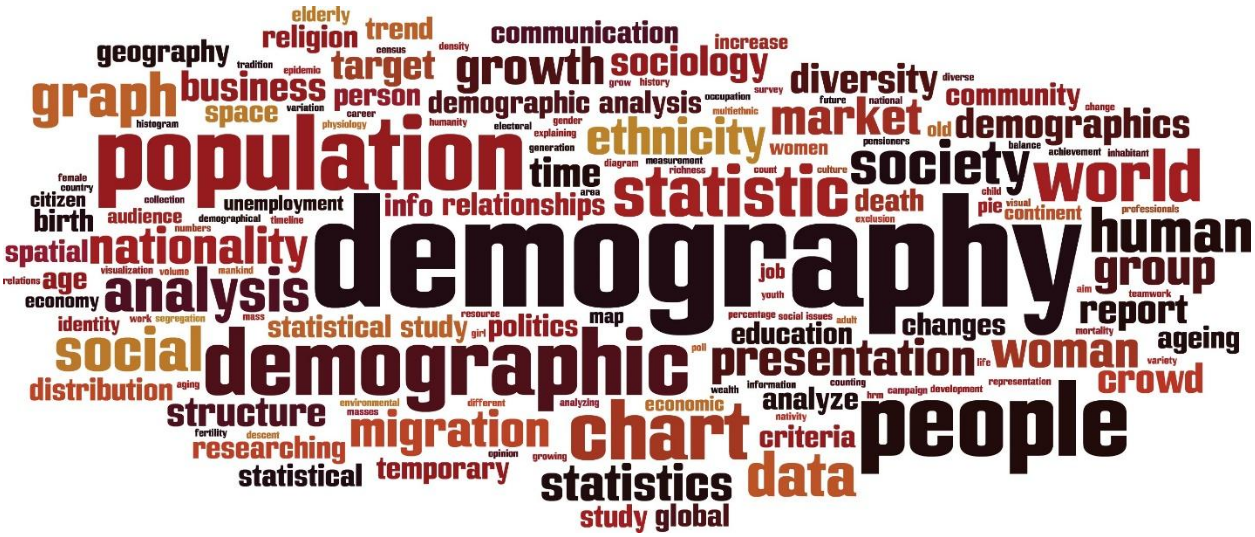
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ESRD DEMOGRAPIC DATA

The IPRO End-Stage Renal Disease (ESRD) Network of the South Atlantic (Network 6) is funded by the federal government to promote the provision of quality healthcare that is safe, effective, efficient, patient-centered, timely, and equitable for all individuals living with ESRD in the states of Georgia, North Carolina, and South Carolina. Network staff members work with patients, providers, and other stakeholders to achieve these objectives by conducting activities consistent with the framework established by the Department of Health and Human Services (HHS) National Quality Strategy, the HHS Secretary Priorities and the Centers for Medicare & Medicaid Services' (CMS) goals.

The IPRO End-Stage Renal Disease (ESRD) Network of the South Atlantic (Network 6) is one of four ESRD Networks managed by IPRO, a non-profit organization that works with government agencies, providers, and consumers to implement innovative programs that improve the healthcare system. In addition to serving as the ESRD Network for the New York, IPRO manages the ESRD Network of New England, ESRD Network of the Ohio River Valley, and ESRD Network of the South Atlantic. 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 more than 130,000 renal patients in 13 states.

According to ESRD National Coordinating Center (NCC) end-of-year data; the ESRD population in the Network 6 region was 67,659, the second largest in the country as of December 31, 2019.

The Network's 2019 activities supported more than 51,455 patients reported as receiving dialysis treatment for ESRD across 790 dialysis facilities, as well as 10 transplant centers and 8 Veteran Affairs (VA hospitals). In 2019, 273 individuals in the Network's service area received kidney transplants making the total count of transplanted individuals in the Network's services area 16,204. A total of 44,313 patients received in-center dialysis treatment and 7,142 patients received dialysis treatment at home. A total of 11,144 patients started dialysis treatment in-center or at home during 2019. The Network has the largest home dialysis population in the country with 10% of the network service area patients receiving treatment on a home modality.

The largest concentration of patients and dialysis facilities in the Network's service area is located in Georgia; the second highest population is in North Carolina; and South Carolina has the smallest population. In 2019, 30 Medicare-certified dialysis facilities opened in the Network service area, increasing the number of facilities from 760 to 790. Within the Network's service area, 80.1% of the dialysis facilities are owned or managed by a large dialysis organization (LDO); 12.3% are owned or managed by medium or small dialysis organizations; and 7.6% are single, independent facilities.

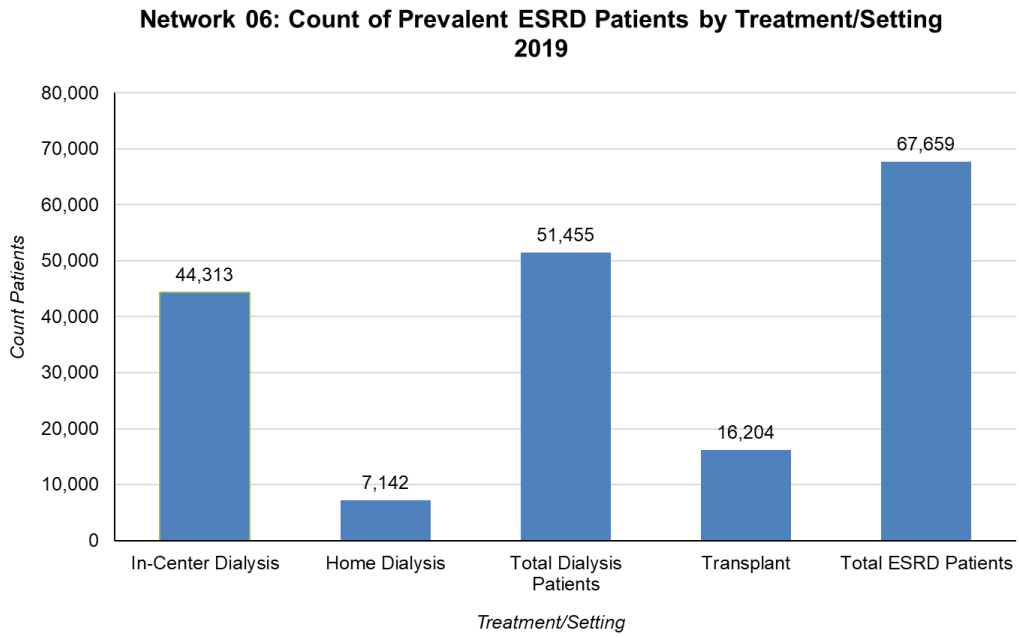
The Network 6 service area continues to have a large number of facilities that support remote populations; thereby providing greater access to care. While this provides patients with access to dialysis treatment services, many patients have to travel significant distances to see a vascular access surgeon, to be evaluated for a transplant, to receive home modality training and other medical care. Many patients are dependent on county provided transportation that may not provide transportation for services outside of the county causing delays in seeking treatment or exploring other modality options where these treatment options are not available in the county they reside.

Approximately 10.2% of the nation's Medicare-certified dialysis facilities are located in the Network 6 service area; this represents the largest number of facilities in any single 18 ESRD Network. An observation by the Network is that having many facilities in an area can lead to staff shortages, leadership transition issues, and the need for frequent retraining due to continual turnover as staff respond to a competitive market place. These issues create challenges for the Network as we work to

establish continuity in care and to sustain practices for optimal outcomes.

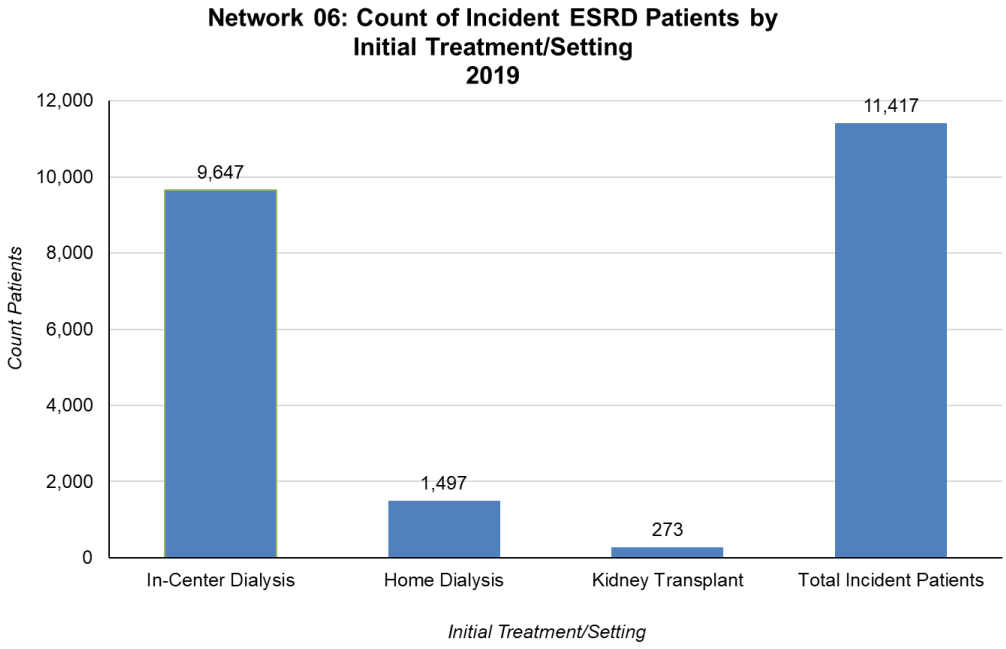
The Network has established strong partnerships across its service area to assist with creating and implementing interventions designed to meet goals outlined in the ESRD Network Statement of Work (SOW). Through collaboration with its Network Council, Medical Review Board, Patient Advisory Committee, Grievance Committee, the Southeastern Kidney Transplant Coalition, State Department of Health, Regional Healthcare Coalitions and Network activity-specific committees, Network staff are quickly able to respond to CMS priorities. Throughout 2019, the Network deployed interventions and strategies that targeted patients, dialysis and transplant providers, and other stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of care for ESRD patients are detailed in this report.

Graph 1 - Count of Network Prevalent ESRD Patients by Treatment/Setting for 2019



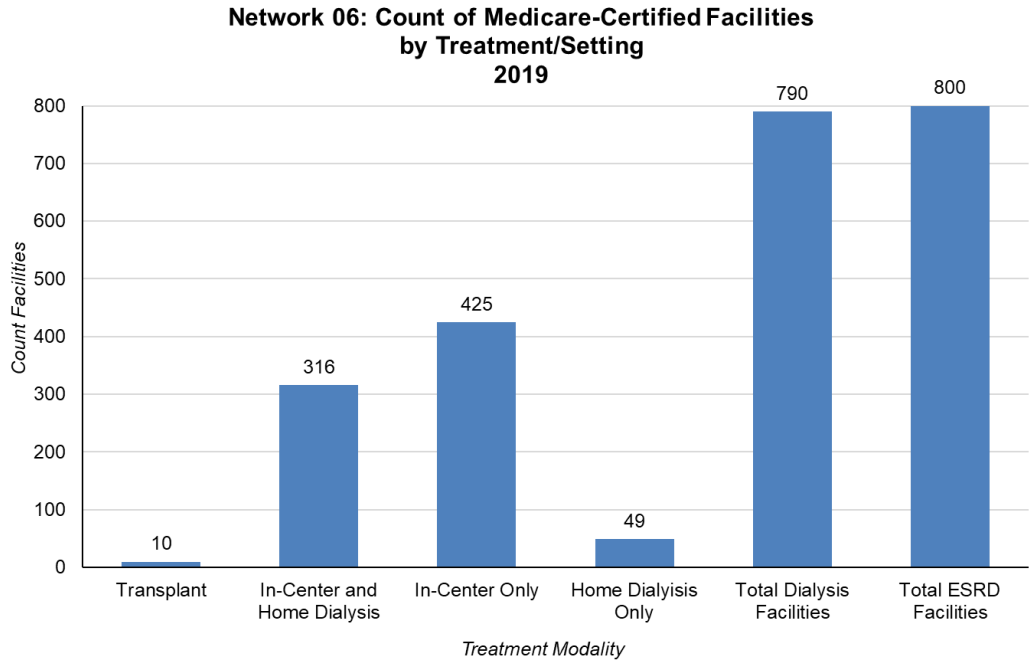
Total Dialysis Patients = In-Center Dialysis + Home Dialysis
Total ESRD Patients = Transplant + Total Dialysis
SNF dialysis patients are not shown due to small numbers.
Source of data: CROWNWeb May 2020

Graph 2- Count of Network Incident ESRD Patients by Initial Treatment/Setting for 2019



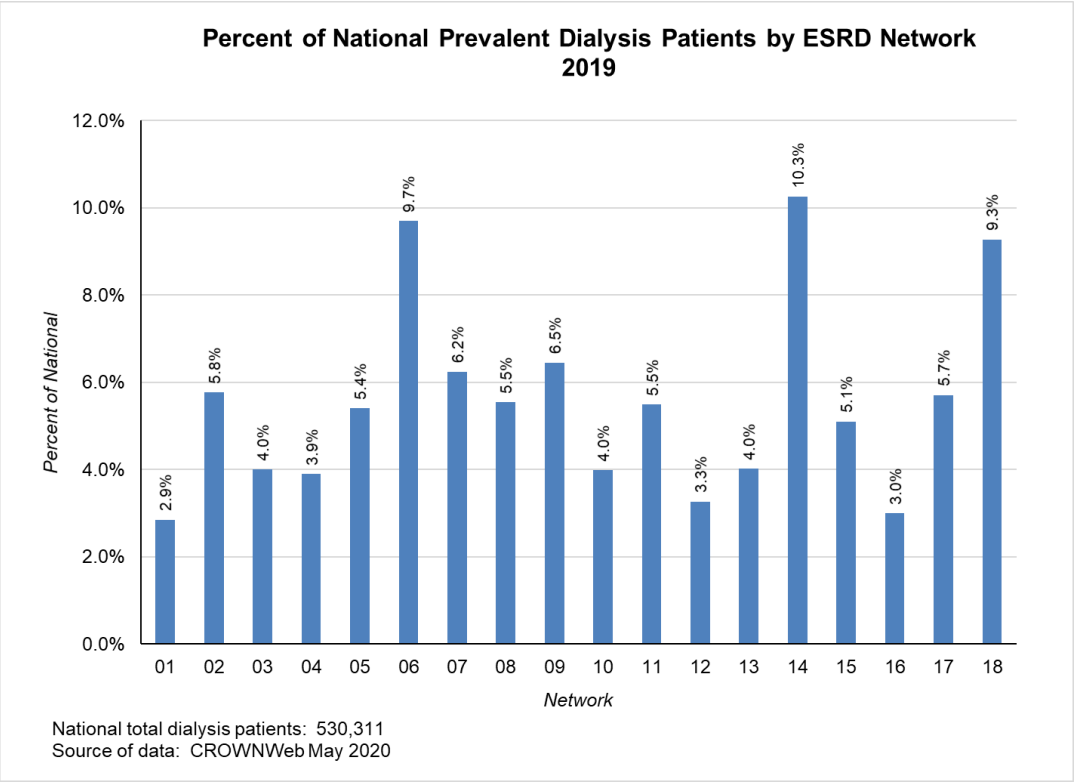
Total Incident Patients = In-Center + Home + Kidney Transplant
Source of data: CROWNWeb May 2020

Graph 3- Count of Network Medicare-certified Facilities by Treatment/Setting for 2019

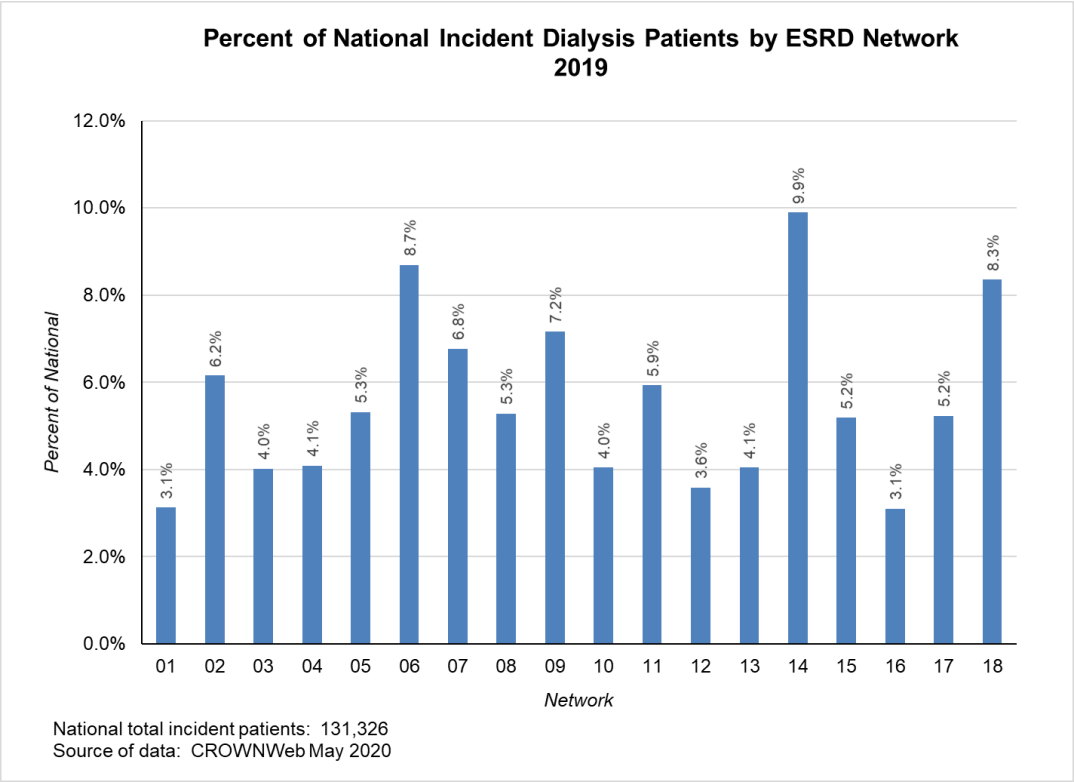


Total Dialysis Facilities = In-Center and Home Dialysis + Home Dialysis Only + In-Center Only
Total ESRD Facilities = Transplant + Total Dialysis Facilities
Source of data: CROWNWeb May 2020

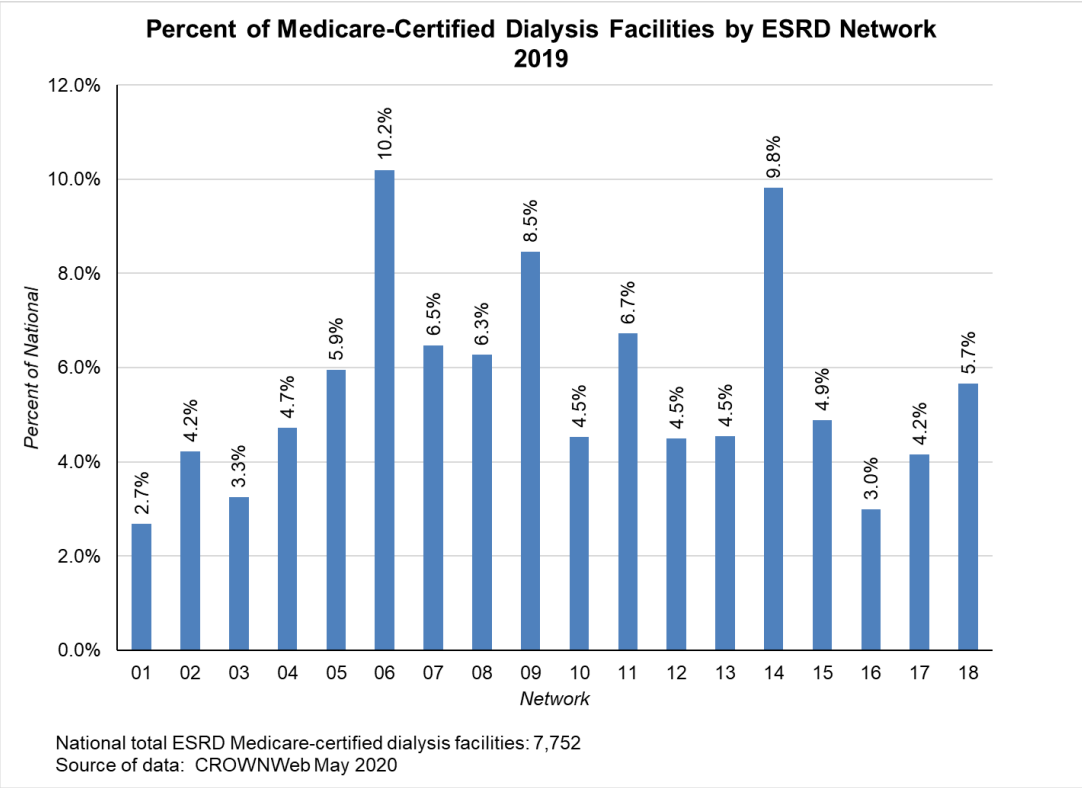
Graph 4- Percent of National Prevalent Dialysis Patients by ESRD Network for 2019



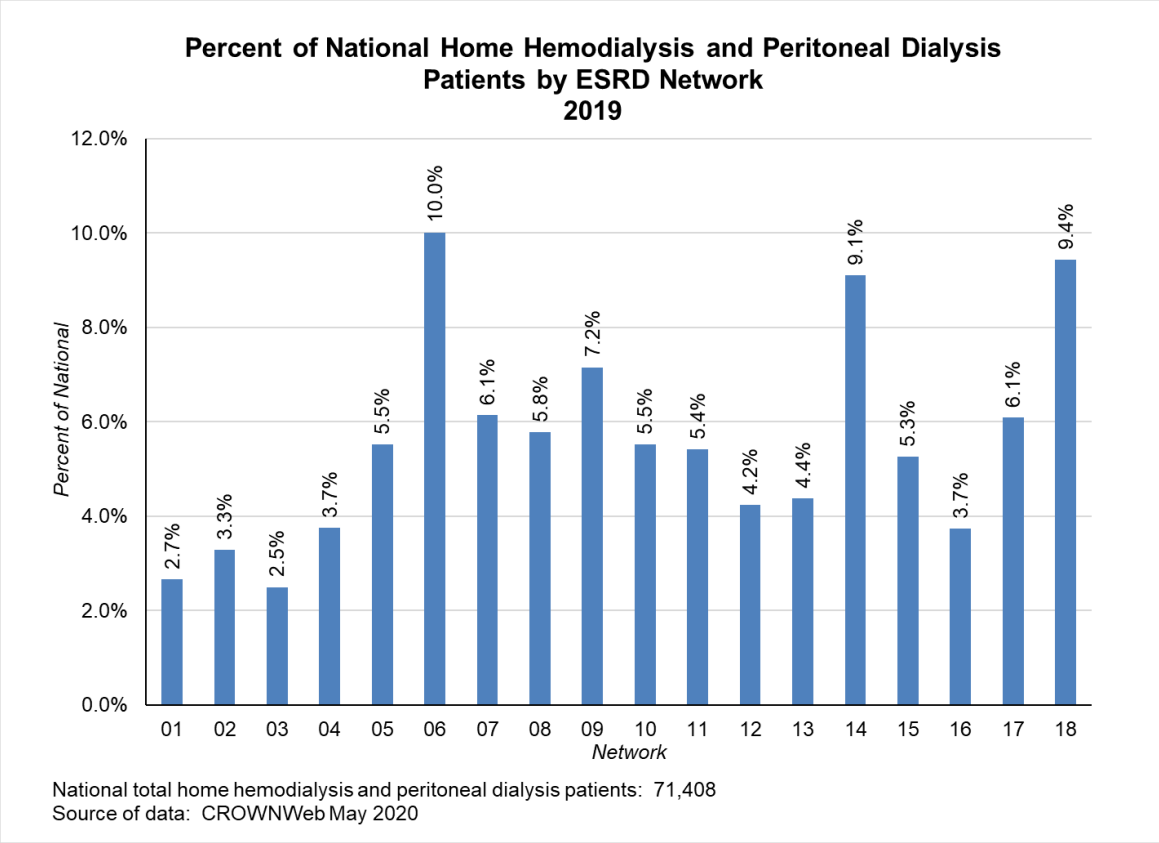
Graph 5- Percent of National Incident Dialysis Patients by ESRD Network for 2019



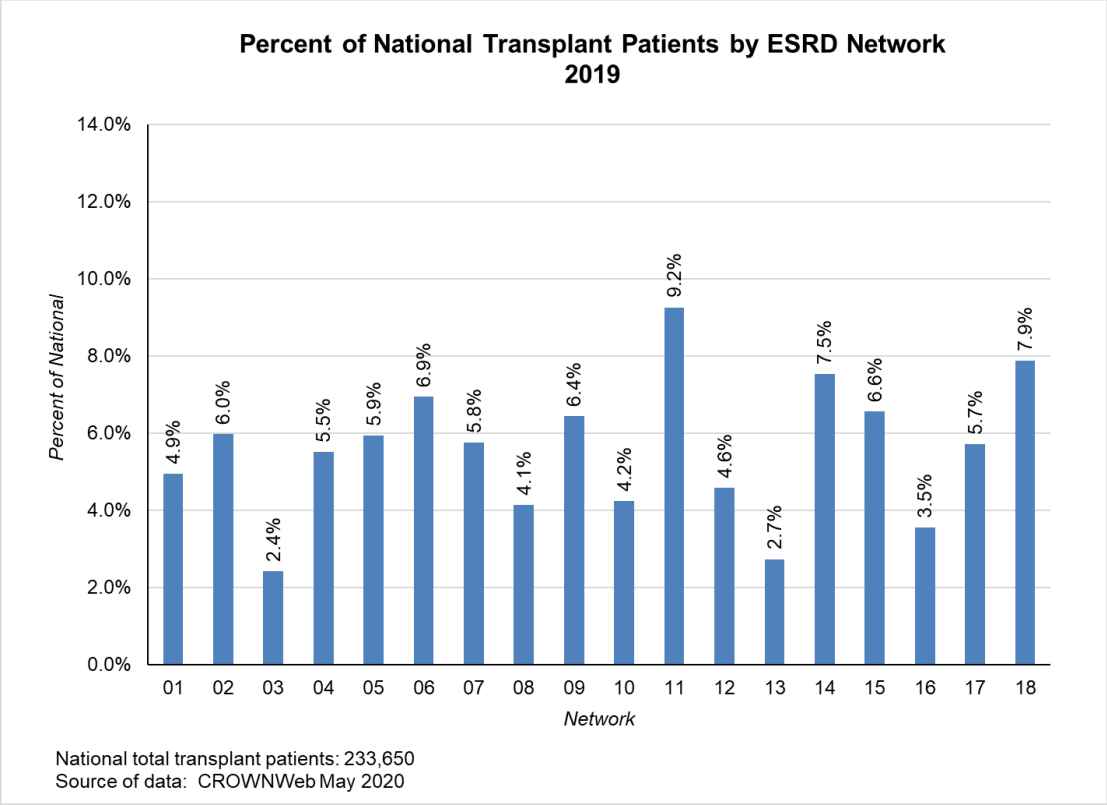
Graph 6- Percent of Medicare-certified Dialysis Facilities by ESRD Network for 2019



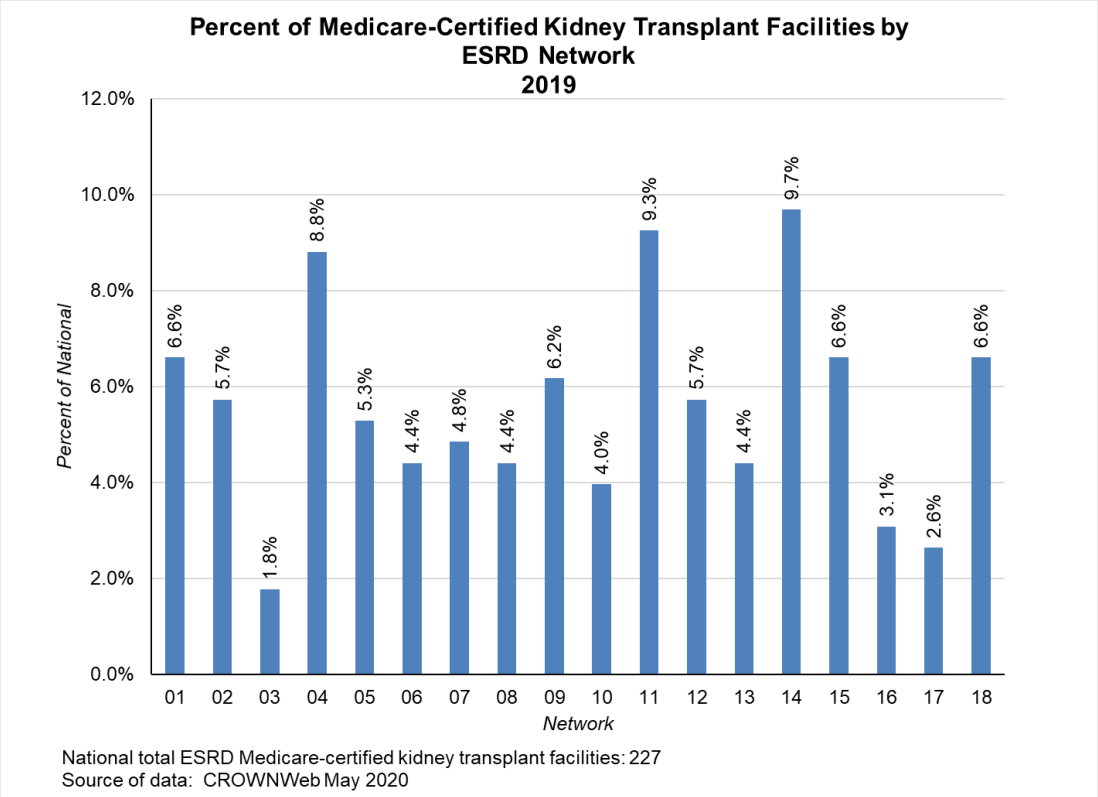
Graph 7- Percent of National Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network for 2019



Graph 8- Percent of National Transplant Patients by ESRD Network for 2019



Graph 9- Percent of Medicare-certified Kidney Transplant Facilities by ESRD Network for 2019

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ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

IPRO ESRD Network of the South Atlantic responds to grievances and access to care cases filed by or on behalf of ESRD patients and works with facilities to address concerns in order to mitigate issues which could result in a patient access to care case. The Network supported patients and facilities with 404 cases during 2019.

The Centers for Medicare & Medicaid Services defines a grievance as "written or oral communication from an ESRD patient and/or an individual representing an ESRD patient, and/or another party, alleging that an ESRD service received from a Medicare-certified provider did not meet the grievant expectations with respect to safety, civility, patient rights, and/or clinical standards of care." The three grievance categories accounted for 29%, or 106, of the total number of Network supported cases. These categories include General Grievances (66), Immediate Advocacy (35) and Clinical Area of Concern (5). A comprehensive analysis of grievances occurring in the Network's service area revealed that the most prevalent issues were staff related or involved patients wanting to learn more about their rights. A root cause analysis (RCA) revealed that key problem areas include poor communication between patients and staff, lack of communication about an established grievance process and lack of scheduled care conferences for proactive resolution. The Network created new educational resources, utilized best practice strategies and provided intervention materials to mitigate grievances.

The two additional grievance categories, which can be initiated by patients or facilities, account for 75%, or 298, of the total number of cases addressed by the Network in 2019. These categories include Facility Concerns (44%) and Access to Care (31%). Network staff supported 175 Facility Concern cases, providing technical assistance, including education and resources to dialysis facility staff. Providing assistance to support facility staff in being proactive about patient concerns has been shown to be a successful intervention to avoid involuntary discharges and establish community relationships; based on outcomes of the Network's semi-annual grievance audits.

The Network opened 123 Access to Care cases to work with facilities and advocate for patients to avert potential Involuntary Discharges (IVD) and Involuntary Transfers (IVT). This category included "at-risk" to IVD/IVT cases, actual IVD/IVT, and patient initiated cases (involving patients who are a "failure to place" in an outpatient dialysis facility). These cases focused on concerns regarding abusive or disruptive behavior, non- adherence, and staff related and treatment related concerns. The Network's review of access-to-care issues identified that the most prevalent issues involved involuntary discharges as a result of threatening and violent behaviors that continued even after several attempted interventions by the facility. The second highest cause for IVD was due to physicians terminating their relationships with patients because of non-adherence/non-compliance concerns.

With each of these cases, the Network advocated for the patient, promoting the patient's right to participate in his or her healthcare, to have a voice in the services provided by the facility. The Network mediated cases regarding patients' concerns with the facility Interventions were developed and implemented to provide facility staff with guidance on communication techniques that would better their patients' care. In many cases, the Network discussed with facility staff:

- The importance of establishing professional boundaries with patients;

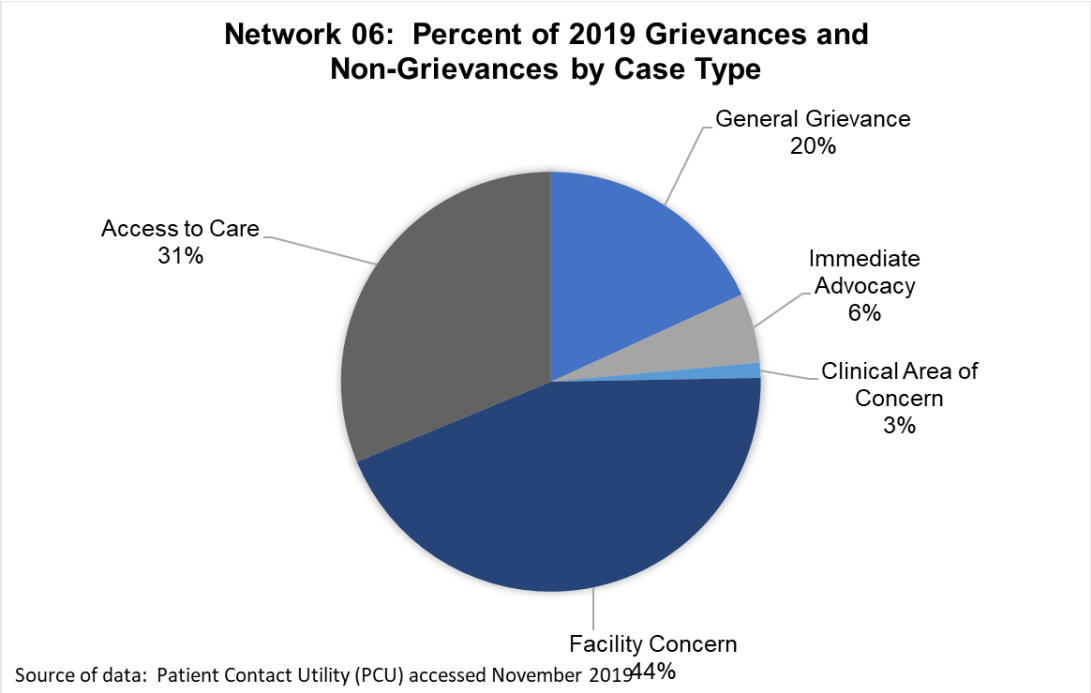
- The value of patient centered care, reminding staff that learning about what matters to the patient is important to understanding how to best assist in his or her care (e.g., mental health unmet needs, lack of housing, immigration, lack of health insurance). This assists staff in establishing goals that will be meaningful and helpful for each patient.

The Network released a series of discharge-related resources to facilities in its service area throughout 2019, as a way to educate staff about the involuntary discharge process and encourage facilities to be proactive with efforts to mitigate issues before they rise to the level of a discharge.

Barriers in grievance related activities included differences in state regulations governing physicians' ability to discharge a patient from their practice; which in turn lead to the patient not having physician orders to continue to receive treatment at the dialysis facility. This often results in access to care issues in which patients seek treatment in an acute care setting.

Grievance best practices and interventions included:

- Staff training on strategies for empowering patients to support them in taking a more active role in their care;
- Staff training on communication techniques that address decreasing conflict;
- Expanding the focus beyond the patient's physical needs to a holistic patient-centered approach;
- Site visits with a focus on grievances and access to care concerns;
- Strengthening patient and provider relationships through a shared decision-making approach;
- Using webinars to educate patients on their rights and the Network's role in grievances; and
- Distribution of a grievance management toolkit to support facilities in creating a robust internal grievance process. The toolkit included:
    - A poster encouraging patients to speak up;
    - A grievance process guide;
    - A new ESRD Network grievance brochure;
    - Grievance process question and answer overview;
    - *A Dialysis Patient Grievance Toolkit* created by the Kidney Patient Advisory Council (KPAC) of the Forum of ESRD Networks. The toolkit promotes improving communication early in the grievance process and includes resources to support patients' understanding of how and when to escalate issues to a grievance and a poster to create awareness of resources available in the toolkit;
    - *The Dialysis Patient Depression Toolkit*, also created by KPAC, was distributed to dialysis facilities across the Network's service area to support facility staff and patients in coping with dialysis and addressing the mental health needs of ESRD patients.


Network 06: Percent of 2019 Grievances and Non-Grievances by Case Type
General Grievance 20%
Immediate Advocacy 6%
Clinical Area of Concern 3%
Facility Concern 44%
Access to Care 31%
Source of data: Patient Contact Utility (PCU) accessed November 2019

ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA

Long Term Catheter Quality Improvement Activity

Project Overview

The Long Term Catheter (LTC) Quality Improvement Activity (QIA) was designed to reduce the rates of LTCs in ESRD patients. Individuals who undergo hemodialysis are at increased risk of developing infections due to the repeated need to access their blood. Research shows that patient morbidity and mortality rates are related to the type of vascular access used for dialysis, with a higher infection rate associated with use of LTCs, as compared with arterial venous fistula (AVF) among eligible adult (≥18 years of age) in-center hemodialysis patients (Foley & Lok, 2013)[1]. The Network has made progress in decreasing LTC rates in facilities with rates greater than 15%. The Network continues to emphasize to both patients and professionals that catheters for vascular access in ESRD patients should be a temporary solution.

Targeted Facilities

The Network identified 42 facilities to participate in the LTC reduction QIA. Identified facilities were selected from 50% of facilities in the Network's service area with the highest bloodstream infection rates. Each selected facility had a LTC rate greater than 15%, as reported by the ESRD NCC, for the period January – June 2019, with LTC rates ranging from 15.15% to 28.57%

Goals and Outcomes

The Network focused on reducing use of LTCs in facilities with an LTC rate greater than 15% to achieve a 2% decrease in LTC rates in the targeted dialysis facilities. The Network was able to achieve 1.4% reduction rate within target facilities in QIA targeted facilities. However, when comparing the Network's performance to the national average across the 18 ESRD Networks, Network 6 had the lowest LTC rate (10.1%).

Interventions

The results of root cause analyses (RCAs) conducted in targeted facilities identified common root causes of high LTC rates across target facilities. Common challenges identified as root causes included patient comorbidities (52%), missed appointments (44%), patient refusal to consider AVF or graft placement (48%), and delayed appointments (36%). The information from the RCAs guided the interventions and webinar topics for this project. Network interventions included:

- Distribution to facilities of monthly performance metric reports that included national and regional AVF goals and the facility's progress toward the QIA LTC goal. These Network-developed data feedback reports allowed the facility to monitor outcomes, trends and, if necessary, to identify barriers that impeded progress toward the project goal. If additional challenges were identified, the Network worked with the facility to implement a second RCA and to develop an individualized corrective action plan (CAP) to assist the facility in implementing additional action steps.
- Facilities implemented a Network-developed monthly *Vascular Access Placement: Patient Tracking Tool* to track progress of patients' vascular access planning and to review any barriers that may be causing delays in appointments. The tracking tool also assisted in guiding catheter reduction activities and status in QAPI discussions.
- Distribution to facilities and patients of a peer mentorship training module and toolkit specific to vascular access. The peer mentorship program is designed to facilitate patients sharing information with other patients about the benefits of a permanent

[1] Lok. C, and Foley. R. (2013, 8 (7) 1213-1219; Vascular Access Morbidity and Mortality: Trends of the Last Decade. Clinical Journal of American Society of Nephrology. Retrieved May, 2019.

access vs. an LTC. The toolkit included a poster outlining the pros and cons of the different types of vascular access, a *Questions and Concerns about Permanent Accesses* booklet, and the *Lifeline for a Lifetime – Planning for Your Vascular Access* guide.
- The Network encouraged patient engagement and participation in facility QAPI meetings, lobby days, and peer education.
- Distribution of the *Vascular Access Planning for Professionals* guide to facilities as a way to assist patients with navigating the "*8 Steps to Catheter Freedom*," including supporting patients in scheduling appointments and preparing for surgery.
- Mid-point and wrap up QIA webinars promoted sharing and spread of best practices by facilities that successfully overcame barriers and/or had a significant decrease in their LTC rates.
- The Network collaborated with staff at Fresenius Kidney Care (FKC) to educate nephrologists and facilities on LTC reduction. The collaboration included education from an expert vascular access surgeon concerning best practices in surgical procedures for permanent access placement. Additionally, the Network introduced the Network-created *Vascular Access Incident Report*, which provides the nephrologist and facility a review of each patient's access at the start of outpatient dialysis and indicates which patients received pre-ESRD care.
- To overcome barriers and offer facility support throughout the QIA, the Network conducted facility performance calls to focus on progress, facility performance, barriers and solutions.

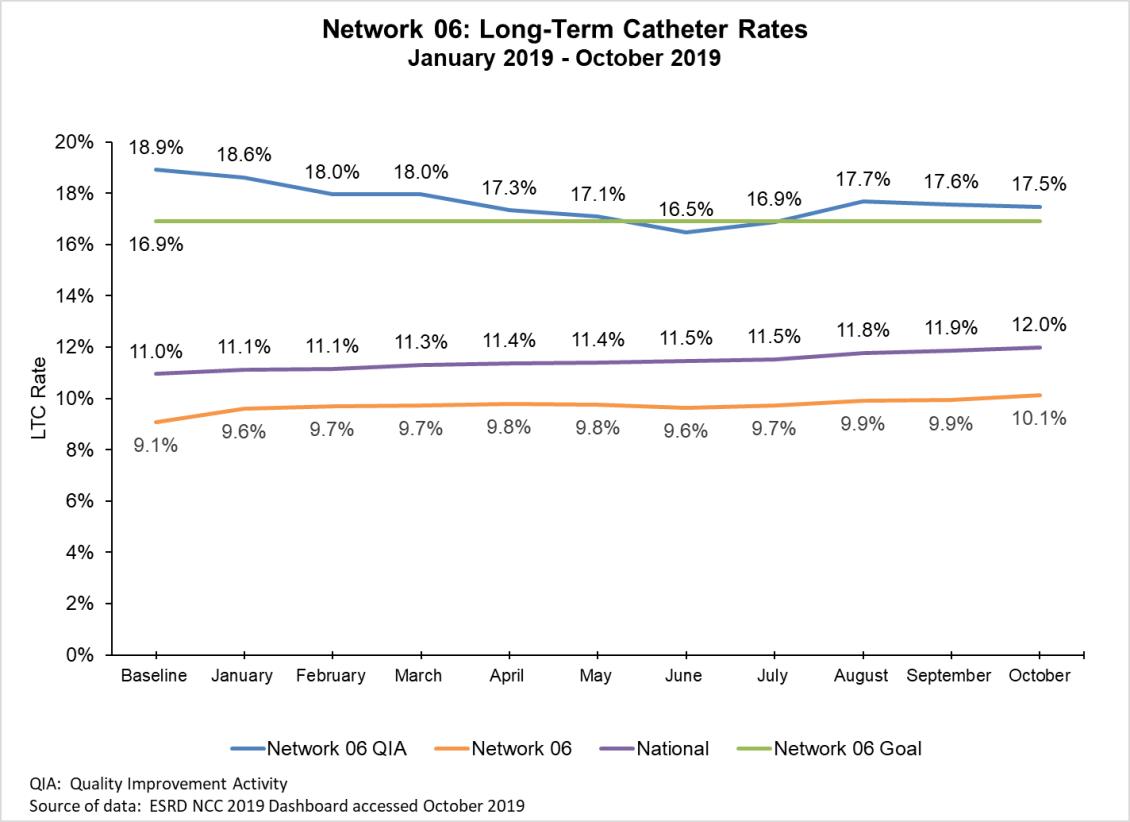
Barriers to achieving goals

- Patients discharged to outpatient facilities from the acute setting with a catheter and no follow up appointment with a vascular surgeon.
- Delays in patients getting appointments with interventional radiologists and surgeons.
- Inability to place permanent access in a population of patients identified as high risk with multiple co-morbidities.
- Patient refusal of permanent access placement.
- In certain geographic areas within the service area there were few or no vascular surgeons specializing in dialysis access placement, thus creating challenges for patients attempting to access surgical intervention.

Best practices spread to achieve goals Target facilities identified the following strategies as best practices

- Facility collaboration and monthly meetings with their referring hospital, vascular access surgeons, and interventional radiologists to achieve improvement in access placement prior to discharge and / or schedule access appointments prior to patient discharge.
- Having a staff member (Vascular Access Coordinator/Champion) dedicated to educating staff members and patients and monitoring patients' progress toward permanent access placement and timely removal of LTCs.
- Data transparency across the Network, dialysis facility staff and State Surveyor Agency was achieved via the *LTC Progress Report/Achievement Level Repor*t (distributed monthly). The report, which indicated facility progress toward LTC reduction and intervention participation, was used by state surveyors during re-certification to validate the facility's participation in QI focus areas.

Long Term Catheter Rates--
Network QIA Facilities, Network-wide and National--
January 2019 to October 2019



QIA: Quality Improvement Activity
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Bloodstream Infection Quality Improvement Activity

Project Overview

The Bloodstream Infection (BSI) Quality Improvement Activity (QIA) was designed to increase facility use of the 9 CDC Core Interventions in support of the reduction of bloodstream infections. Hemodialysis patients are at higher risk than the general population for acquiring healthcare associated infections (HAIs) and specifically BSIs, due to the regular and frequent use of catheters and other forms of access to their bloodstream while dialyzing.

Data for this activity came from the Centers for Disease Control and Prevention (CDC) NHSN system. Baseline for this project was the semi-annual quarterly pooled mean BSI rate from January to June 2019. The baseline rate for the cohort was 1.01% with a 20% reduction goal of 0.81%. The Network ended the project at 0.537%; exceeding the goal of 0.81%. Additionally, the Network achieved a 46.95% relative reduction in the BSI rate for the cohort.

Targeted Facilities

The Network identified 376 facilities reporting the highest BSI rates (those facilities with reported BSI rates in the top 50% within the Network's service area) based on the National Health Safety Network (NHSN) semi-annual pooled mean at baseline (Quarters 1 and 2, 2018). The Network worked intensively with a 20% cohort of 151 facilities out of the entire Network service area that had the highest infection rates, ranging from 0.49% to 3.33% per 100 patients, per month. The Network also worked with facilities in the 50% cohort (376) to support their efforts to join a Health Information Exchange (HIE) or another evidence-based, effective information transfer system to bridge communication gaps that often exist between the dialysis facility and hospital or physician's office.

Goals and Outcomes

The goals of the BSI QIA were to increase awareness and reporting of BSIs as well as achieve a 20% relative reduction in the pooled mean BSI rate in 20% of facilities in the Network's service area. The Network's interventions succeeded in achieving a significant decrease in the pooled mean BSI rate from 1.012% at baseline (Quarters 1 and 2, 2018) to 0.520% at re-measurement (Quarters 1 and 2, 2019) This result exceeded the goals of 0.810% and a 47.95% relative reduction. The Network supported 101 facilities or 26.8% of facilities in the 50% cohort in joining an HIE, exceeding the 10% goal; 61.80% of facilities in the use of all nine CDC Core Interventions and 96.9% of facilities completed the NHSN Dialysis Event Surveillance Training.

Interventions

The Network launched a *Knowledge and Practice Assessment Survey* for the intervention facilities that helped identify best practices, challenges, barriers and areas for improvement. Common root causes identified by facilities included poor patient compliance (70%), lack of patient education (30%) and patients returning from the hospital with a BSI (50%). The information from the RCAs guided the interventions and webinar topics for this project. The Network required interventions included:

- Distribution of the CDC-created poster: *Core Interventions for Dialysis BSI Prevention*; to support facilities in the use of the CDC Core interventions as a targeted approach to preventing BSIs. The Network also provided staff training and education on infection prevention using the *CDC – Infection Prevention in Dialysis Setting Training Course for Outpatient Hemodialysis Healthcare Workers.*

- Distribution of CDC developed educational materials and resources for staff and patients consisting of: the *CDC Conversation Starter*, *Clean Hands* Count for patients and providers and CDC audits and checklists for practice observations.
- Implementation of an Infection Prevention Champion to facilitate staff / patient education, conduct audits using the CDC recommended audit tools and provide real time feedback and support on infection prevention behavior.
- Facility staff attendance in the ESRD NCC's HAI Learning and Action Network (LAN) meetings with stakeholders and other dialysis facilities. Meetings featured experts in the area of BSI/LTC reduction.
- The Network worked with those responsible for infection prevention /control monitoring at the facility to ensure that the yearly training about BSI reporting was completed and entered in NHSN.
- The Network launched the *Patient Education Initiative*, giving facilities the option to create a bulletin board, lobby day and/or education station. The Network encouraged facilities to implement this initiative in partnership with a recruited Patient Facility Representative (PFR).
- Regional leadership engagement was achieved by establishing virtual collaborative meetings with facilities that showed low and high performance in order to spread best practices and mitigate barriers.
- Distribution to facilities of monthly performance metric reports. These Network-developed data feedback reports allowed the facility to monitor outcomes, trends and, if necessary, to identify barriers that impeded progress toward the project end-goal.

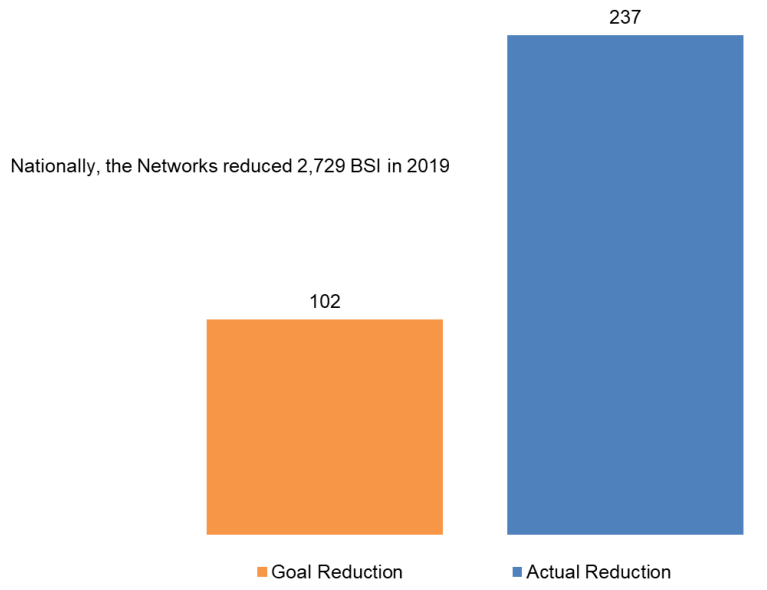
Barriers to achieving goals

- Incomplete implementation of all nine of the CDC Core interventions, specifically omitting use of antimicrobial ointment. Over 40% of facilities responding to the CDC Core Intervention Use Survey did not use antimicrobial ointment.
- Patients starting hemodialysis with a catheter was reported as barrier to the reduction of LTCs. Although, the Network concluded the project with an LTC rate of 9.92%, the incident data reflects that 71% of patients new to hemodialysis started their first outpatient treatment with a catheter access.

Best practices spread to achieve goals

- Data transparency across the Network, dialysis facility staff and State Surveyor Agency was achieved via the *BSI Progress Report/Achievement Level Repor*t (distributed monthly). The report, which indicated facility progress toward LTC reduction and intervention participation, and was used by state surveyors during re-certification to validate the facility's participation in QI focus areas.
- Network interventions promoted the implementation of an Infection Prevention Champion to conduct audits with the CDC recommended audit tools and provide real time feedback and support to staff and patients in infection prevention behavior.

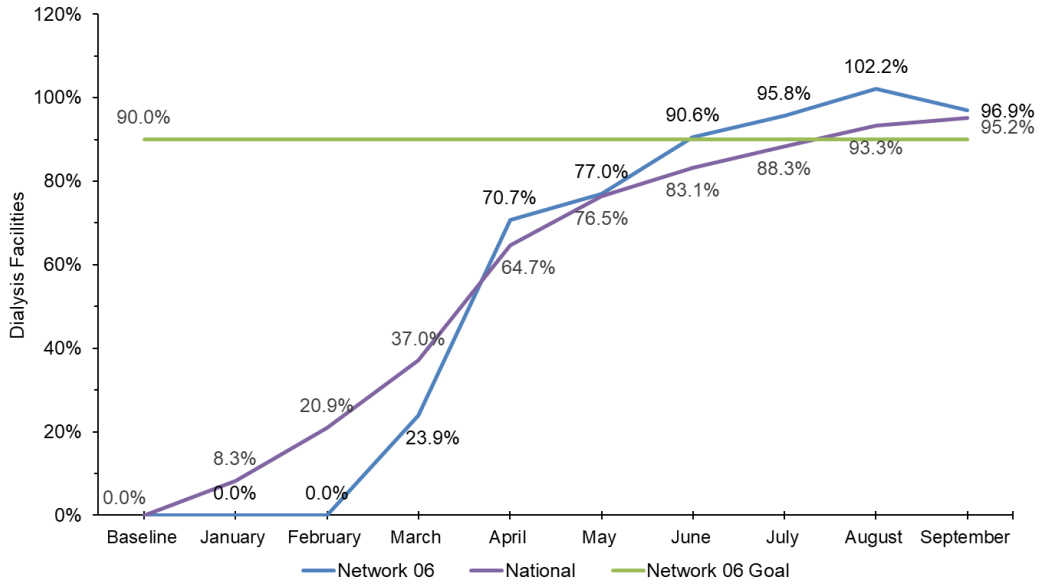
Network 06: Reduction in Bloodstream Infections (BSI) in QIA Facilities



The Network goal was to decrease the rate of BSI by 20% or greater relative reduction in the pooled semi-annual mean in facilities participating in the QIA

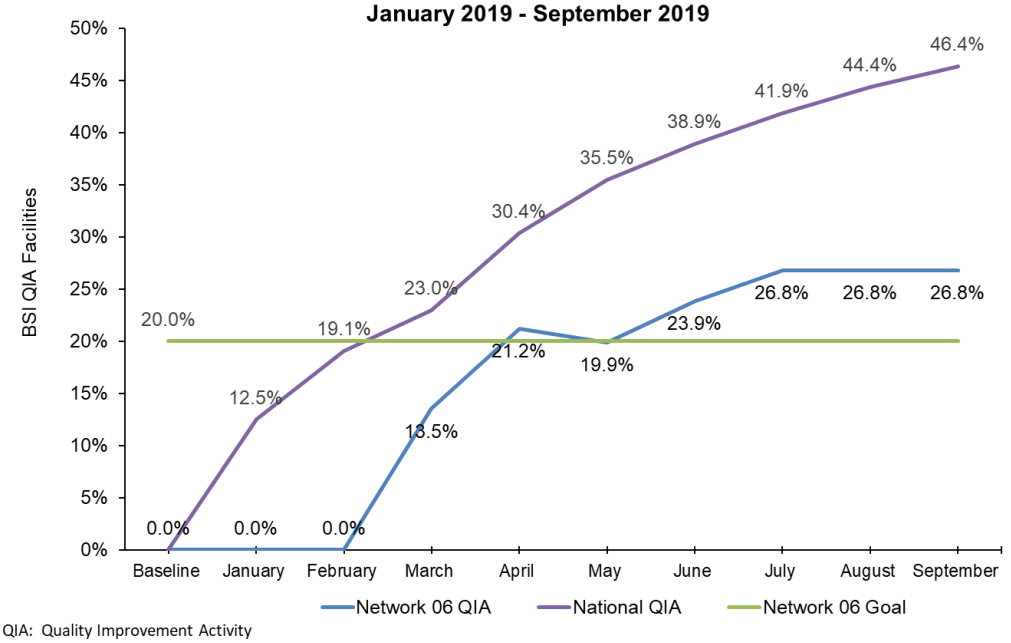
QIA: Quality Improvement Activity
Source of data: National Healthcare Safety Network (NHSN) January 2019 - June 2019 compared to January 2018 - June 2018

Network 06: Percent of Dialysis Facilities with At Least One Person Who Has Completed the NHSN Dialysis Event Surveillance Training
January 2019 - September 2019



Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Network 06: Percent of BSI QIA Facilities with a Health Information Exchange or Evidence-Based Highly Effective Information Transfer System
January 2019 - September 2019



QIA: Quality Improvement Activity
BSI: Bloodstream Infection
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Transplant Waitlist Quality Improvement Activity

Project Overview

Patients with ESRD must be equipped with information that allows them to choose a treatment among the many options available, including renal replacement therapies and kidney transplantation. While renal replacement options offer life-sustaining treatment, transplantation provides the opportunity for better clinical outcomes like reduced hospitalizations, mortality and morbidity; improved patient quality of life, and lower medical costs. In response, CMS established a goal to increase the number of ESRD patients on the kidney transplant waitlist to 30% by the year 2023, from the national kidney transplant waitlist rate of 18.5% as of 2016.

Targeted Facilities

For this QIA, the ESRD Network targeted 31.3% of its service area (235 facilities), representing approximately 13,300 beneficiaries. Facilities were selected based on transplant waitlist average rate baseline data for a period of 5 years (2013-2018) that was provided by the ESRD NCC. Facilities with the lowest average rate through this period of time were selected to participate in this QIA project.

Goals and Outcomes

The Network's efforts focused on increasing the number of patients on the transplant waitlist from an average rate of 0.04% at baseline in order to demonstrate a two percentage point improvement in the targeted QIA facilities by October of 2019. In addition, the Network worked to identify any negative trends at participating facilities in order to address them and make a positive impact. The Network achieved a 2.2% transplant waitlist average rate in QIA facilities towards the goal of 2.88%, which represents a 76.5% progress towards goal. This positioned Network 6 above the ESRD Networks' national average of 74.2% progress toward goal. However, as shown in the graphic below, the progress seen at selected QIA facilities (2.2% rate) was below the progress of all facilities in the Network 6 service area and the ESRD Networks national average rate, both performing at a 3.1% average rate. Although the Network did not achieve a full two percentage point increase, it did successfully assist facilities in getting 372 patients added to the transplant waitlist during the QIA period of January – September 2019.

Interventions

Implementation of a *Knowledge and Practice Assessment Survey* in targeted facilities identified best practices, challenges, barriers and areas for improvement. Highlights of the information collected include: Approximately 50% of facilities communicate monthly with transplant centers, however communication breakdown between dialysis facility and transplant center was one of the highest rated barriers (24%) identified by staff; conversely facilities identified their greatest success working with transplant centers was receiving reports from the transplant center with a summary of the status of their patients (52%). This information was shared with the Southeastern Kidney Transplant Coalition (SEKTx) which comprises the Network, all adult transplant centers in the region, patients, patient advocate organizations, and dialysis organizations among others. Members of the SEKTx were able to provide the Network with intervention strategies and collaborated on developing resources to mitigate facility and patient barriers. These interventions and resources included:

- Mailings of patient educational resources that included the *Treatment Options Navigator, Education Station Banner* and *How do you find out if a kidney transplant is right for you? Poster*.

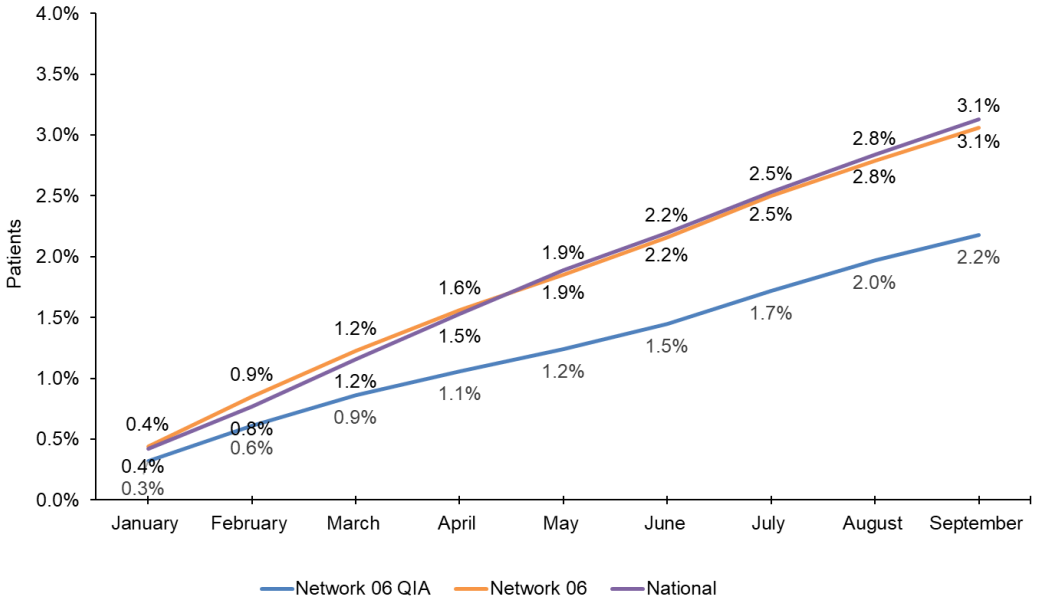
- A patient education initiative that offered the option to create a bulletin board, lobby day and/or education station. The Network encouraged facilities to run this intervention in partnership with a recruited Patient Health Coach (PHC) and Patient Facility Representative (PFR). For the Transplant QIA project, the celebration of *Donate Life-Blue and Green Day* was also encouraged, and additional materials were made available electronically. This activity was completed by 88% of the QIA facilities.
- The Network took an interdisciplinary approach by identifying PHCs who participated in a series of trainings that included a *Coaching Fundamentals Module* and *Transplant as a Treatment Options*. The individuals in this role were assigned to participate in patient education activities along with the Project Lead and PFR.
- The recruitment of PFRs allowed patients to be included in QAPI meetings, host patient support groups and establish peer mentoring programs. In addition, PFRs were trained in the IPRO-developed iChoose *Kidney App* to educate other patients about how to use this tool to assess kidney transplant options.
- Regional leadership engagement was achieved by establishing virtual collaborative meetings with facilities that showed low and high performance in order to spread best practices and mitigate barriers.
- Professional training/education was offered through Network webinars, but also through collaboration with stakeholders such as the ESRD NCC (LAN calls), the Georgia Transplant Foundation (*Trends in Transplant (TNT) Worships*, Explore Transplant/Duke Transplant Center Professional Training, Piedmont Transplant Center Workshop, and others.
- To improve communication between dialysis facilities and transplant centers, the Network continued to work in collaboration with the SEKTx to implement the use of the Transplant Referral Exchange (TREX) in transplant centers and dialysis facilities to promote real time two-way communication on patient status as they navigate the evaluation process for transplant.

Barriers to achieving goals

- Financial barriers, lack of transportation resources, and lack of communication between the dialysis center and the transplant center were the three most common barriers identified among QIA facilities.
- Medical and non-medical contraindications, along with patient noncompliance and/or lack of follow through with transplant related appointments and other requirements were also identified by QIA facilities as strong barriers to transplant.

Best practices spread to achieve goals

- Data transparency across the Network, dialysis facility staff and State Surveyor Agency was achieved via the *BSI Progress Report/Achievement Level Repor*t (distributed monthly). The report indicated facility progress toward LTC reduction and intervention participation and was used by state surveyors during re-certification to validate the facility's participation in QI focus areas.
- The United Network for Organ Sharing (UNOS) Transplant Waitlist Report with patient level data was provided to facilities to allow them to identify actions needed keep moving patients forward in the transplant steps. This initiative also helped strengthen facility transplant tracking systems.
- Facilities identified that incorporating patient-to-patient education was a successful approach for transplant, especially for those who were able to coordinate with a transplanted patient.



QIA: Quality Improvement Activity
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Home Therapy Quality Improvement Activity

Project Overview

The objective of the Home Dialysis Quality Improvement Activity (QIA) was to increase ESRD patients' knowledge about, and use of, home modality options. Home dialysis (hemodialysis or peritoneal dialysis) supports positive benefits for ESRD patients that include improved health outcomes, enhanced quality of life, flexible treatment schedule, and reduced healthcare costs. Despite these benefits, home dialysis modalities continue to be underutilized in the US. As a result, CMS established a five-year target goal to increase the number of ESRD patients dialyzing at home to 16% by 2023 from the 2016 national average of 12%.

The Network assisted targeted facilities with utilizing the CMS seven steps to monitor patient progression from initial interest in modality change through the start of modality training. These steps were designed to support facilities with identifying and overcoming barriers as they relate to patient interest and referral to home modality treatment options: 1) Patient interest in home dialysis, 2) Educational session to determine the patient's preference of home modality, 3) Patient suitability for home modality as determined by a nephrologist with expertise in home dialysis therapy, 4) Assessment for appropriate access placement, 5) Placement of appropriate access, 6) Patient accepted for home modality training, and 7) Patient begins home modality training.

Target Facilities

The Network identified 31.3% of dialysis facilities within its service area to participate in the Home Dialysis QIA. This represented a total of 235 facilities with the lowest rates of home dialysis utilization in the Network's service area. Dialysis facilities were selected to participate based on the analysis of baseline data over a five-year period (October 2013 – September 2018) that was provided by the ESRD NCC.

Facilities that met the following criteria were selected for inclusion in the QIA: (1) The facility offered home modality training; (2) The facility had a stand-alone home program; and (3) The facility was located within a 60-mile radius of a training unit. Acute, hospital based, and Veterans' Administration facilities, as well as those facilities with a total patient census less than 25 patients were excluded from the QIA.

Goals and Outcomes

The Network focused on increasing the number of patients training for a home modality in order to demonstrate a two percentage point improvement in the natural trend of patients utilizing home therapies from 0.35% baseline to 2.35% at re-measurement (October of 2019) by having 572 patients trained on a home modality. Each participating facility was assigned an individual target goal; goals were based on the number of patients at each targeted facility that were required to begin home modality training in order to meet the project goals by re-measurement. The final QIA measure value was 4.5%, while the overall Network rate was 6.3% compared to the National rate of 5.9%. Although the Network did not achieve a full two percentage point increase, it did successfully assist targeted facilities with adding 542 patients to home therapies during the QIA period of January – September 2019 which representative 69.5% achievement toward the total goal.

Interventions:

Upon launch of the Home Dialysis QIA, the Network requested targeted facilities to complete a *Knowledge and Practice Assessment* to establish a baseline of challenges and barriers to patient referrals and training for home dialysis. The results of the assessment indicated that the most challenging barriers for dialysis facilities and patients to overcome were: lack of family

support/involvement (54%), patients not interested in learning about home options (49%) and dependence on facility staff to perform treatments (40%).

To assist targeted facilities in overcoming the identified challenges and barriers, the Network implemented the following interventions:

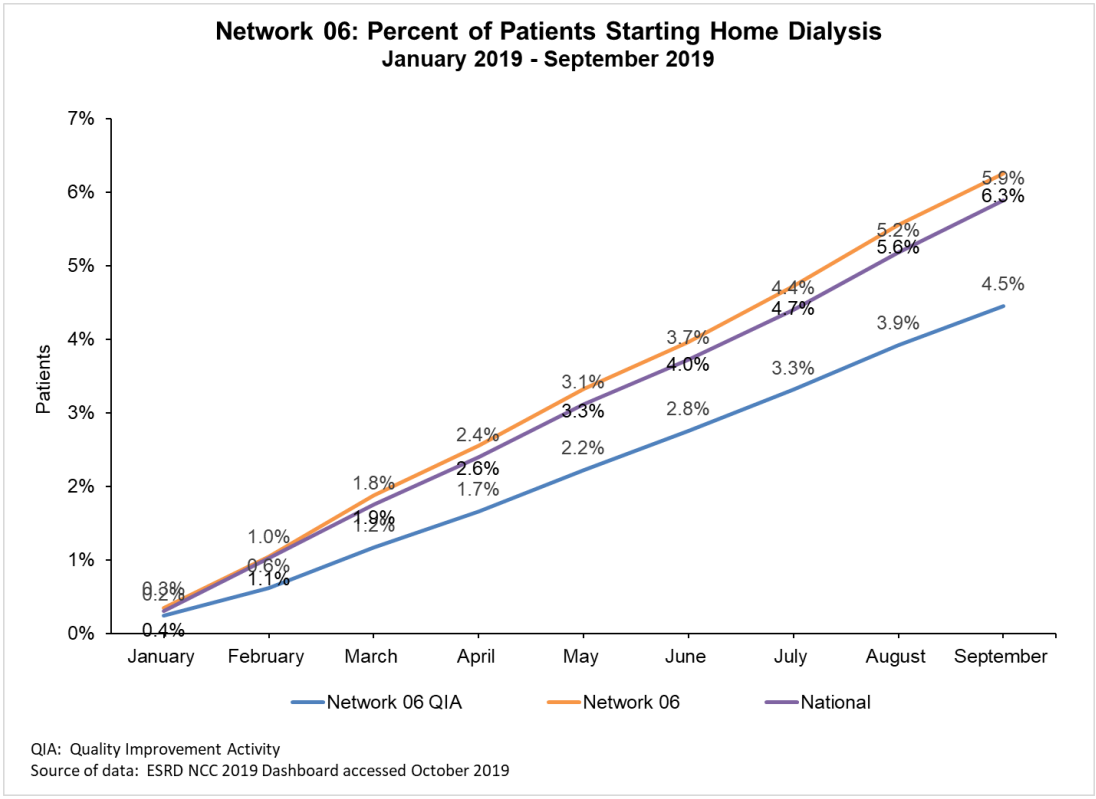
- Monthly performance calls that brought together staff from targeted facilities and regional leadership within the same dialysis organization. Through these calls, the Network paired low performing facilities with high performing facilities within the same organization to share best practices for overcoming challenges and barriers to patient education, home modality interest, referral and training. The virtual meetings and in-person site visits allowed the ESRD Network team an opportunity to provide support by educating staff and talking to patients in facilities that had not been demonstrating improvement during the project period.
- Targeted facilities were asked to identify a staff member to be designated as a Patient Health Coach (PHC). By offering continuous support and resources about home modality treatment options, the PHCs empowered patients with the knowledge, skills, tools and confidence needed to assist them with making informed decisions based on their individual needs, goals and lifestyles.
- Targeted facilities were asked to identify a Patient Facility Representative to collaborate on the implementation of interventions aimed at increasing the use of home modalities at their center to support the home modality project; activities included the distribution of educational resources such as pamphlets, brochures, interactive games and the creation of an education station and/or hosting lobby days.
- Virtual in-service training for staff at targeted facilities included training and coaching facility staff on effectively displaying data, identifying barriers and working with patients through the CMS seven steps of the home therapies activation process.
- The Network collaborated with dialysis providers and stakeholders to increase the number of patients on a home modality by increasing communication between in-center dialysis facilities and home dialysis facilities.

Barriers to achieving goals:

- Patients choosing to stay in-center was a consistent barrier among targeted facilities due to patients being comfortable and not wanting to change modalities.
- Some facilities identified that lack of referrals to home was a barrier as physicians were not comfortable with promoting or managing patients on a home therapy.
- Through regional collaborative calls, the Network identified that for patients in rural areas there was a lack of access to home programs due to geography.
- Targeted facilities reported in *the Knowledge & Practice Assessment* that the shortage of home dialysis nurses to perform home hemodialysis and peritoneal dialysis trainings presents another barrier.

Best practices spread to achieve goals:

- Collaborations with large dialysis organization educators, nephrology practices, and area hospitals to host lunch & learn activities.
- Utilizing Patient Health Coaches to educate and share interventional resources about home modality options with staff and patients.
- Creation of treatment options educational display boards and the hosting of lobby day activities increased awareness to generate interest and referrals to home modalities.



QIA: Quality Improvement Activity
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Population Health Focus Pilot Project Quality Improvement Activity

Project Overview

It has been documented that the effects that socio-economic situations affect the overall wellbeing of patients with ESRD[2]. Employment among this population in the US is as low as 18.9%. Also, minority populations such as African American, Hispanics, residents of rural areas and females have been found to be less successful in achieving employment (7-8%) within the ESRD community[3]. The ability to go back to work or school has been seen to positively impact the quality of life of dialysis patients. Reasons for this include financial stability, a sense of purpose, and independence.

Through the Population Health Focused Pilot QIA: Support Gainful Employment for ESRD Patients, the Network worked with facilities to promote early referral of patients to vocational rehabilitation services and follow-up counseling. The Network worked with targeted facilities to improve the standard practice of reviewing vocational rehabilitation benefits and referrals of dialysis patients to supportive services.

Target Facilities

The Network worked with 10% of the dialysis facilities (80) in its service area. Facilities were selected based on the referrals and use of services provided by Vocational Rehabilitation (VR) and/or Employment Networks (EN) from baseline data provided by the ESRD NCC. Facilities with a baseline rate at 0% for vocational rehabilitation referrals were selected. Facilities with an average census less than or equal to 10 patients were excluded.

Goals and Outcomes

The goal of this project was to achieve an increase of 10 percentage points in referrals of eligible patients to ENs and/or VR, demonstrate at least a 5 percentage point improvement in the number of referred eligible patients receiving EN and/or VR services, and ensure 100% of patients are screened for interest in vocational rehabilitation services, with all of the above criteria being documented in CROWNWeb. The Network's baseline data as of October 2018 was 0.1% in referrals to EN/VR services; and 0.2% of patients using services of EN/VR. The Network's activities resulted in 100% of patients being screened for interest in rehabilitation services; achievement of a 48.8 percentage point increase in the number of patients referred to EN/VR; and a 7.7 percentage point increase in the number of patients using EN/VR services upon the re-measurement period in September, 2019.

Interventions

The Network implemented a *Knowledge and Practice Assessment Survey* to identify challenges or barriers to vocational rehabilitation screening and referrals in targeted facilities. The information collected indicated that the top three root causes of low referral/utilization rate included (1) lack of patient interest, (2) lack of patient education, and (3) poor health status. To mitigate these and other barriers, the Network worked with facilities using the following interventions:

- Facilities were asked to utilize the *Network Vocational Rehabilitation Interest Form* to facilitate the screening of all patients' interest in rehabilitation services as well as documentation of the results of the screening.

[2] Akyüz, A., Sayın, C. B., Erdal, R., Özcan, C., & Haberal, M. (2018, March). Influence of Social, Economic, Familial, Marital Status, and Disease Adaptation on the Physical and Mental Health Dimensions of Patients Who Are Candidates for Renal Transplant. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/29528005

[3] Hallab, A., & Wish, J. B. (2018, February 07). Employment among Patients on Dialysis. Retrieved November 27, 2018, from https://cjasn.asnjournals.org/content/13/2/203

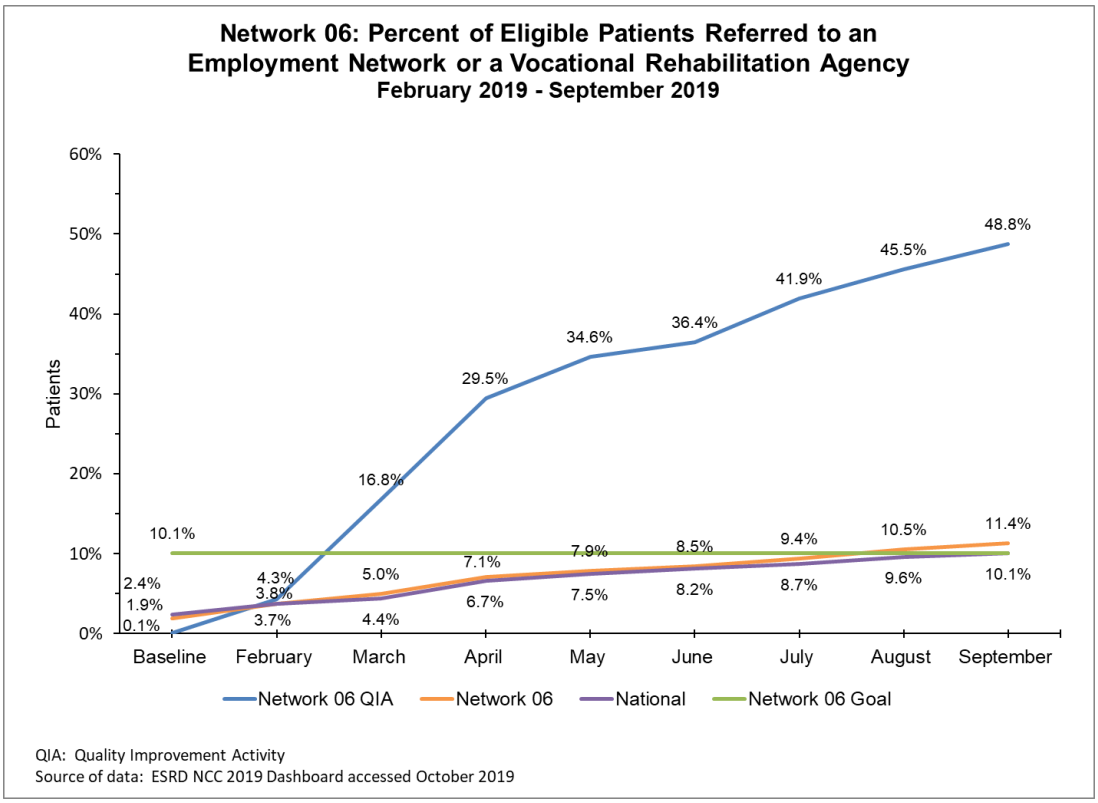
- Distribution of the *Vocational Rehabilitation: Answers to your questions* pamphlet and the Network 6 *Vocational Rehabilitation Flyer* allowed facilities to provide patient education about the VR services provided, state specific resources, and state VR agency phone numbers that facilitated referral efforts.
- Implementation of a *Patient Education Initiative* with the option to create a bulletin board, lobby day and/or education station on the topic of supporting gainful employment. Network resources were provided via mailing or email. Facilities were encouraged to work with Vocational Rehab agencies to host lobby days and/or facilitate job fairs at the facility.
- Professional training/education was offered through Network webinars, but also through stakeholder activities including the ESRD NCC's LAN calls, DCP, among others.
- Regional leadership engagement was achieved through virtual collaborative meetings that showed low and high performance in order to spread best practices and mitigate barriers.
- The recruitment of Patient Facility Representatives (PFR) allowed patient engagement initiatives to include patients in QAPI meetings, host patient support groups and establish peer mentoring programs
- CROWNWeb documentation training was provided through webinars and supporting documents to accurately reflect facility progress toward goal on screening, referral and supporting the use of VR/EN services among ESRD patients.
- Collaboration with the QIN-QIO allowed the Network to educate providers participating in QIO community coalitions about the unique needs of the ESRD population. This also gave the Network an opportunity to invite community providers to support the Network's goals to help ESRD patients return to work/school, thereby improving their overall health status.

Barriers to achieving goals

- Dependence on Vocational Rehab/Employment Network agencies and the lag time from referral to first evaluation appointment was out of the control of dialysis facilities.
- Lack of staff knowledge on CROWNWeb documentation for Vocational Rehab Referral, Use of Service, School and Work status caused for facility rates to be much lower than the real efforts.
- Lack of patient interest in returning to work, related to fear of losing disability benefits.

Best practices spread to achieve goals

- Facilities found the Vocational Rehab Interest Form to be useful in assessing patient interest, and 85% of QIA facilities indicated that they would incorporate as part of their standard practice. This tool seeks to mitigate the perceived barrier of patient lack of interest, while providing a sustainable practice of assessing interest that promotes education about VR/EN resources.
- The Network held 1:1 calls with facilities in order to help them identify patients that were referred or receiving services, but were not accurately documented in CROWNWeb resulting in improved accuracy of data.
- Collaborative calls helped bridge communication between providers, creating a network of support and sharing of best practices.
- Data transparency across the Network, dialysis facility staff and State Surveyor Agencies was achieved via the *Vocational Rehab Progress Report/Achievement Level Report* (distributed monthly). The report indicated facility progress with increasing screenings, patient referrals, and patient use of VR/EN services and intervention participation and was used by State Surveyors during re-certification to validate the facility participation in QI focus areas.



QIA: Quality Improvement Activity
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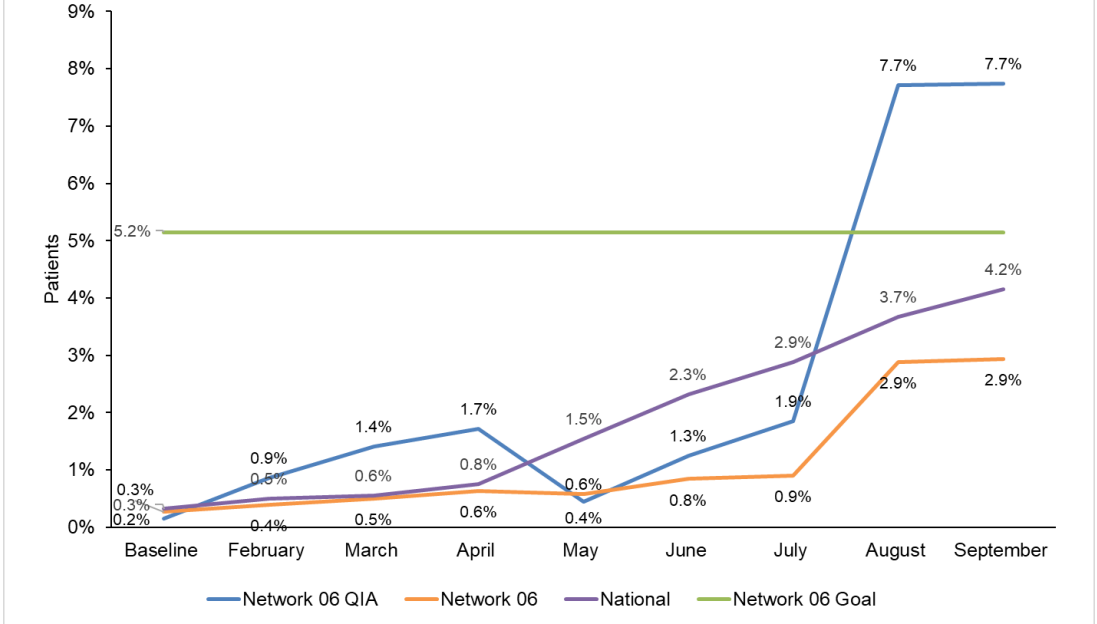

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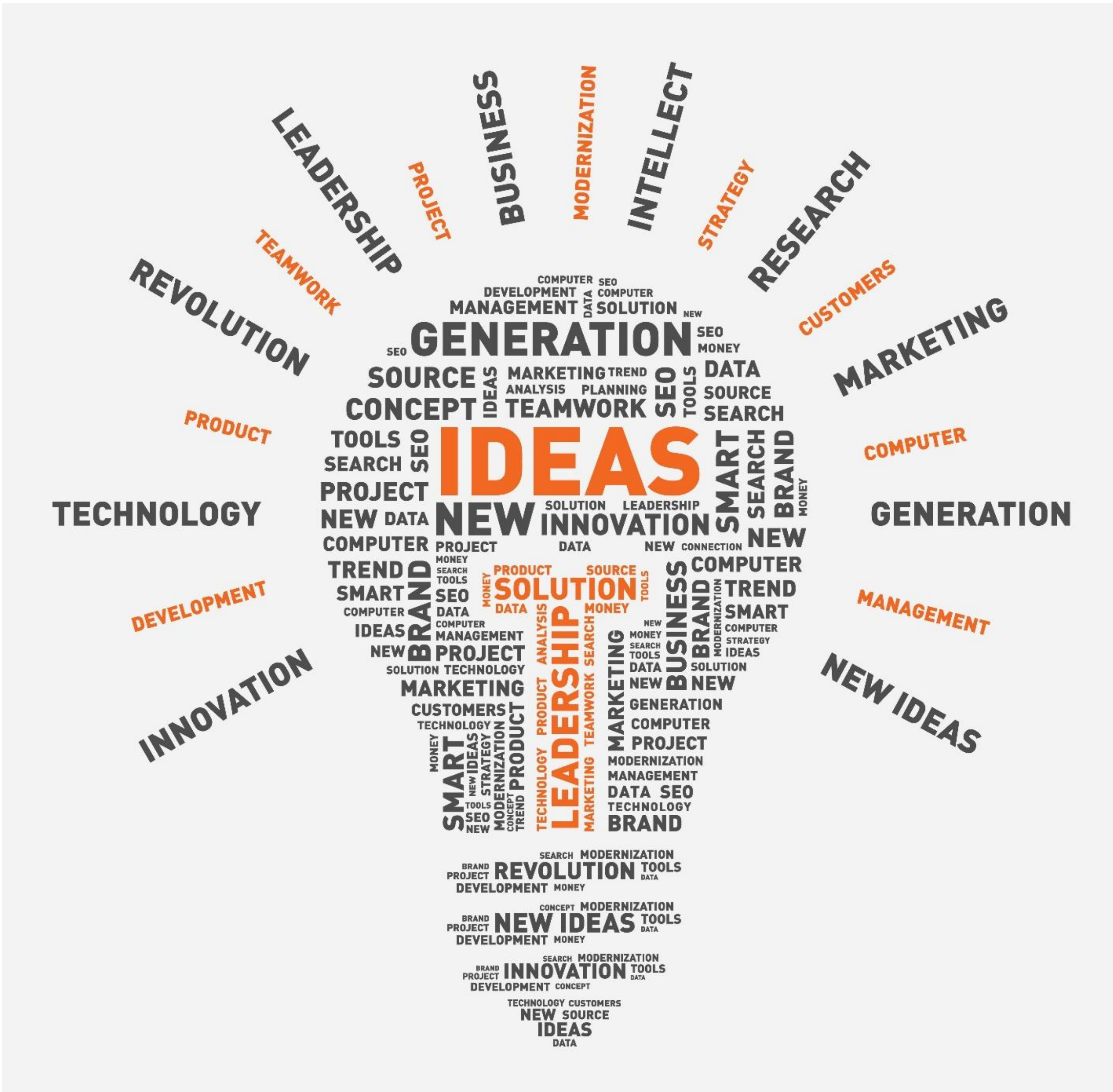
LEADERSHIP
BUSINESS
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NEW IDEAS
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ESRD NETWORK RECOMMENDATIONS

Facilities that Consistently Failed to Cooperate with Network Goals

The Network did not identify any facilities in its service area that failed to cooperate with Network goals in 2019.

Recommendations for Sanctions

No recommendations were made to CMS for additional services or facilities in the Network service area during 2019.

Recommendations to CMS for Additional Services or Facilities

In 2019, the Network made no recommendations to CMS for additional services or facilities.


first
infrastructure
contingency
environment
aid
continuity
public safety
ambulance
training
communications
earthquake
damage
critical
management
patient
mitigation
injury
planning
preparedness
healthcare
plan
safety
fire
agency
warning
survival
team
medical
service
help
urgent
danger
disaster
supplies
protection
emergency room
safe
jeopardy
resilience
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evacuation
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disease
emergency
urgency
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disaster
information
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recovery
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situation
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environmental
risk management
public
response
rescue
hospital
security
room
intervention
operations
medicine
life
accident
risk
education
loss
system

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION

For individuals who have been diagnosed with ESRD, missed dialysis treatments can have serious adverse health effects. This makes the ESRD patient population especially vulnerable during emergencies and disasters. The Network successfully managed three emergency events that required intervention, response, and/or tracking during 2019. For these emergencies, Network staff offered comprehensive support to patients and linked healthcare practitioners to appropriate resources, including the Kidney Community Emergency Response Coalition (KCER) program, local and state offices of emergency management, and other stakeholders as appropriate.

In 2019 Hurricane Dorian brought tropical-storm force winds to much of the southeast coast, along with tornadoes to the Carolinas. Hurricane Dorian caused severe storm surges and flooding in the Outer Banks of NC that contributed to power outages throughout the Carolinas and inundating cities with overflowing rivers. During this event, over 70 facilities were impacted. The Network also supported facilities during winter storm Gia and during tornados in March. These storms had minimal impact to the operations of dialysis facilities in the Network's service area.

All three states in the Network region (NC, SC, and GA) identified the ESRD population as their highest risk in the event of an emergency. The Network collaborated with the Georgia Department of Public Health Dialysis Workgroup and the SC Healthcare Coalition to create and launch a critical asset survey with all facilities in the Network region; yielding an 8% average response rate. The purpose of the survey was to identify facility and patient needs ahead of the start of hurricane season, to identify key information, facility assets and needs. The results of the survey were provided to local, state and emergency management officials to expedite response times to maintain or re-establish operations in case of an emergency.

The results of the critical asset survey revealed that only 11.5% of dialysis facilities had an established relationship with their regional healthcare coalition and 23% had an established relationship with their local emergency management agency. The Network, working in partnership with each state, identified unique and innovative ways to implement strategies to engage and educate dialysis facilities about emergency preparedness resources with the goal to improve continuity in operations for facilities. The Network also fostered an environment of sharing emergency preparedness strategies across the three states. In collaboration with SC, GA, and KCER, the Network presented at the Georgia Emergency Management Association conference on best practices identified in the southeast related to supporting dialysis during disasters. The presentation was well attended and relationships with emergency management services in NC were established as a result of this meeting. The follow summary provides an overview of the collaboration with each state:

Georgia

The Network participated in the Georgia Department of Public Health Dialysis Workgroup. The group's mission is to ensure continuity of care for dialysis patients by increasing preparedness planning, situational awareness, and access to critical medical care before, during, and after emergent events. The workgroup consists of 15 regional coordinating systems, the Georgia Department of Public Health, state surveyors, the ESRD Network and dialysis organizations / facilities. The workgroup developed and hosted an educational webinar series for dialysis facilities that provided a background

on emergency preparedness and suggestions for ways facilities can participate in local health care coalitions. As a result of this webinar, 94% of facilities that attended reported they planned to join the healthcare coalition for their region and 83% reported they planned to reach out to establish a relationship with the local emergency management officials. Over 95% of facilities reported they had a better understanding of the resources available to them during an emergency.

North Carolina

The Network met with multiple organizations across the state to build relationships and bridge communications across services to support continuity of care for ESRD patients. Activities included:

- Attending the NC Healthcare Partnership and Engagement Forum for emergency management response. During this meeting the Network strategized on ways to strengthen healthcare preparedness, support continuity of operations, enhance situational awareness, improve incident management, and augment medical surge.
- A representative from the Eastern NC Healthcare Preparedness Coalition joined the ESRD Network as guest participant of the 2019 National KCER Functional Exercise. During this visit, the coalition was able to provide feedback to the Network, while both organizations were able to better understand the other organization's roles during several simulations that comprised this drill.
- The Network attended a NC Department of Health hosted collaborative meeting of key healthcare partners to improve the emergency response for vulnerable populations. The Network had proposed, and NC accepted, a strategy to engage and educate dialysis facilities regarding NC healthcare coalition and emergency management resources based on the successful work in GA.

South Carolina

The Network participated in the Lowcountry Healthcare Coalition, which represents 11 counties in the southern coastal area of SC. The coalition membership includes representatives of each county's office of emergency management, the Department of Health and Human Services, three large dialysis organizations, the Medical University of South Carolina (MUSC), the ESRD Network and 39 dialysis facilities. The coalition works together to share preparedness best practices. Their goal is to develop a shared emergency preparedness culture among facilities and to create a structured emergency operations plan for continuous dialysis services during events.

- The Network met with Fresenius Kidney Care (FKC) and emergency management officials in the low country to identify an FKC facility that would serve as the flagship facility during an emergency. The ESRD Lowcountry Coalition worked together to establish processes and plans for communicating to patients, transportation companies, shelters, and facility operations. The coalition participated in a drill to evaluate the effectiveness of the processes and plans.
- Six dialysis facilities were identified and designated as emergency facilities to be operationalized to support 24/7 dialysis as needed for the area in addition to wrap around evacuation services, including transportation and sheltering in the event of an emergency depending on the path of the storm. A patient and facility communication plan was developed to assist with communicating critical information.
- The coalition participated in a mock drill to test the continuity plan. Ninety-three percent of participating facilities reported that the emergency preparedness checklist for patients improved their communication planning with patients and 69% of patients reported they would be more willing to evacuate during an emergency based on the structured plan.

ACRONYM LIST APPENDIX

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