



End-Stage Renal Disease
Network of New York

2018 Annual Report



Lason Park and Arboretum, Westchester, NY

Submitted June 2019
Prepared by:
IPRO End-Stage Renal Disease Network of New York
<http://network2.esrd.ipro.org>

Submitted to:
U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services
for Contract Number HHSM-500-2016-00020C

Table of Contents

ESRD NETWORK DEMOGRAPHIC DATA	3
ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA	10
ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA	14
Long-Term Catheter Quality Improvement Activity	14
Blood-Stream Infection Quality Improvement Activity.....	17
Transplant Waitlist Quality Improvement Activity.....	22
Home Therapy Quality Improvement Activity.....	25
Population Health Focus Pilot Project Quality Improvement Activity	28
ESRD NETWORK RECOMMENDATIONS	33
ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION	35
ACRONYM LIST APPENDIX.....	36

ESRD NETWORK DEMOGRAPHIC DATA

IPRO ESRD Network of New York (Network 2) 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. IPRO supports nearly 100 state and federal programs, including serving as a CMS Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for New York State, South Carolina, and the District of Columbia. In this role, IPRO works to bring Medicare beneficiaries, providers, and communities together in data-driven initiatives that increase patient safety, make communities healthier, better coordinate post-hospital care, and improve clinical quality.

IPRO also 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 127,000 renal patients in 13 states.

Network 2 serves ESRD patients, dialysis providers, and transplant centers throughout New York State. The role of the Network is to improve the quality of care for people who require dialysis, transplantation, and/or other life-sustaining treatment for ESRD. The Network aligns its mission and activities with the National Quality Strategy's three broad aims and CMS' priorities. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

New York State comprises a population of 19, 542, 209 persons across 62 counties and is anchored by the most populous city in the nation, New York City (NYC).¹ The state is topographically diverse, encompassing 54,555 square miles, with 47,126 square miles of land, 7,429 square miles of water,² and the nation's largest state forest preserve in the Adirondack Mountains.³

New York is the fourth most populous state in the country,⁴ with almost 20 million residents in 2018⁵ and an average population density of 419 persons per square mile in 2014.⁶ An estimated 43% of the population resides in NYC, with over 70% of the State's population concentrated within the city and its surrounding counties on Long Island and in the Hudson Valley.⁷ The dramatic variance in population density between upstate and downstate New York impacts the availability of and patient access to healthcare services.

¹ <https://www1.nyc.gov/site/planning/data-maps/nyc-population/population-facts.page>

² <https://www.census.gov/quickfacts/fact/table/NY,US/PST045218>

³ <http://www.dec.ny.gov/lands/4960.html>

⁴ <https://census.gov/newsroom/press-releases/2015/cb15-215.html>

⁵ Table 2: Population, Land Area, and Population Density by County, New York State - 2014 Source: U.S. Census Bureau, Population Division. Release Date: December 2015.

https://www.health.ny.gov/statistics/vital_statistics/2014/table02.htm

⁶ https://www.health.ny.gov/statistics/vital_statistics/2014/table53.htm

⁷ Table 1: Estimated Population by Age, Sex and Region, New York State - 2014 Source: U.S. Census Bureau, Population Division. Release Date: December 2015.

https://www.health.ny.gov/statistics/vital_statistics/2014/table01.htm

In the downstate region (Hudson Valley, New York City, and Long Island), healthcare services are plentiful and relatively easily accessible by public and private transportation. In upstate New York, where the population density is much lower, transportation options are limited and there are fewer treatment facilities. This means that ESRD patients in rural areas typically travel farther and longer to reach dialysis clinics, vascular surgeons, hospitals, and other healthcare providers and clinicians; factors that may affect treatment options, patient experience of and satisfaction with care, and quality of care. The ESRD population in New York State was the sixth largest in the country as of December 31, 2018, according to ESRD National Coordinating Center (NCC) end-of-year data.

The population of the five boroughs of NYC—Bronx, New York, Richmond, Kings, and Queens Counties—grew by 2.7% to 8.5 million from 2010 to 2016, according to U.S. Census Bureau estimates.⁸ Demographic and health-related changes in New York State’s population parallel changes taking place nationwide. For example, New York’s large baby boomer population is aging and, according to the Centers for Disease Control and Prevention (CDC), the risk for developing chronic kidney disease increases after age 50 and the disease is most common among adults older than 70 years.⁹

The state’s population of almost 20 million is rich in ethnic, racial, religious/spiritual, cultural, and lifestyle diversity. According to US Census Bureau estimates for 2017¹⁰ New York State’s population was 69.6% White, 17.7% African American, 9.1% Asian, 1.0% American Indian and Alaska Native, and 0.1% Native Hawaiian; 2.5% of the population identified with two or more races. The Hispanic or Latino population of the state was approximately 19.2% in 2017, according to the same source.

The Network’s activities supported the more than 30,000 hemodialysis patients reported as receiving dialysis treatment for ESRD in the Network area as of December 2018. With more than 13,000 patients in the Network’s service area received kidney transplantation. In New York State, renal patients were served by 304 Medicare certified dialysis facilities, 13 transplant centers, and six Veterans Affairs (VA) hospitals.

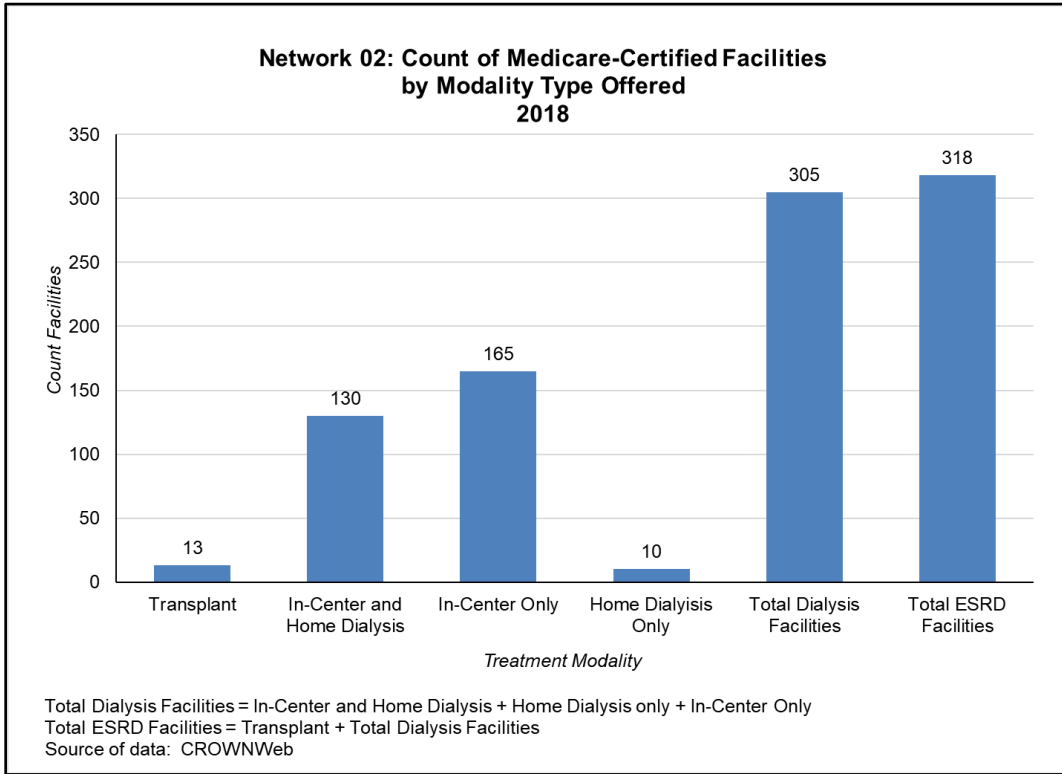
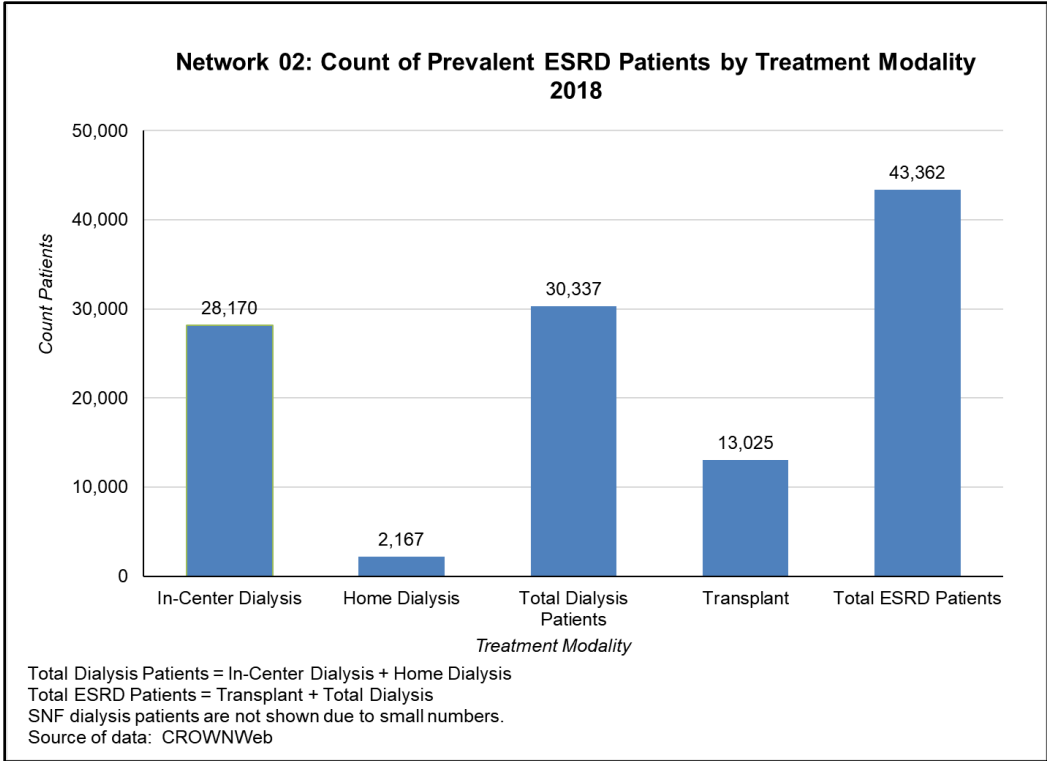
In 2018, the Network worked in collaboration with its Network Council, Medical Review Board, Patient Advisory Committee, Grievance Committee, Education Committee, and Network activity-specific Committees to develop quality improvement projects aligned with the goals identified by CMS for the ESRD Network program. The Network works closely with ESRD patients, patients’ family members and friends, nephrologists, dialysis facilities, patient advocacy organizations, and other ESRD stakeholders to improve the quality of care provided to ESRD patients in New York State.

The Network deployed focused interventions that targeted quality of care improvement for patients, dialysis staff, transplant programs, and other renal community stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of life for ESRD patients are detailed in this report.

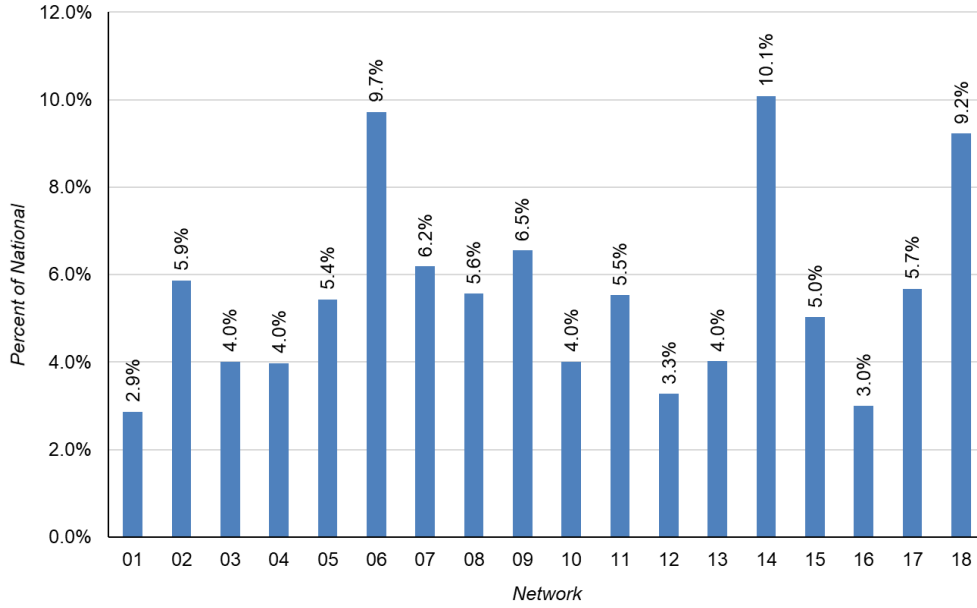
⁸ <http://www1.nyc.gov/site/planning/data-maps/nyc-population/current-future-populations.page>

⁹ https://www.health.ny.gov/statistics/vital_statistics/2014/table03.htm

¹⁰ <https://www.census.gov/quickfacts/table/PST045216/36>

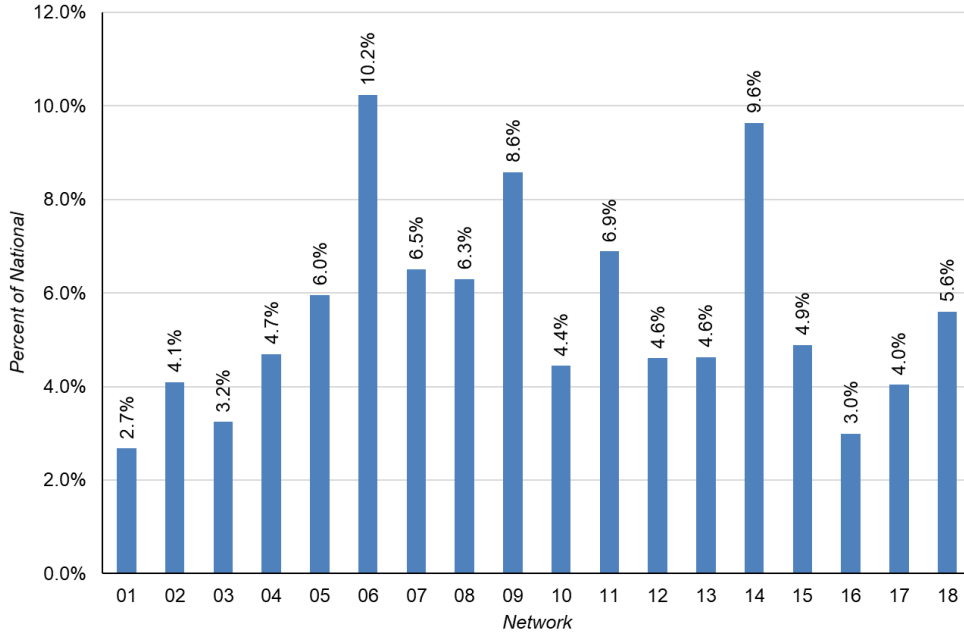


**Percent of Prevalent Dialysis Patients by ESRD Network
2018**



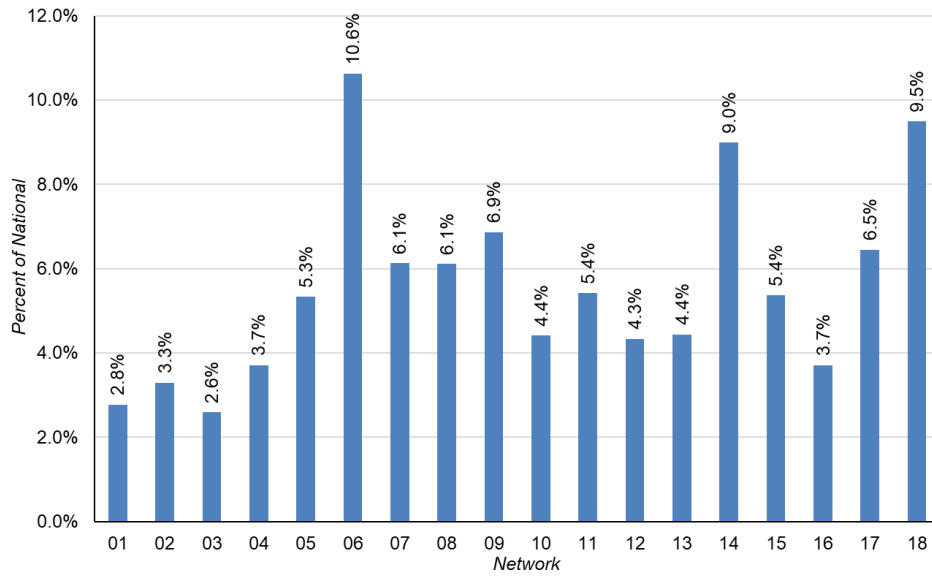
National total dialysis patients: 518,106
Source of data: CROWNWeb

**Percent of Medicare-Certified Dialysis Facilities by ESRD Network
2018**



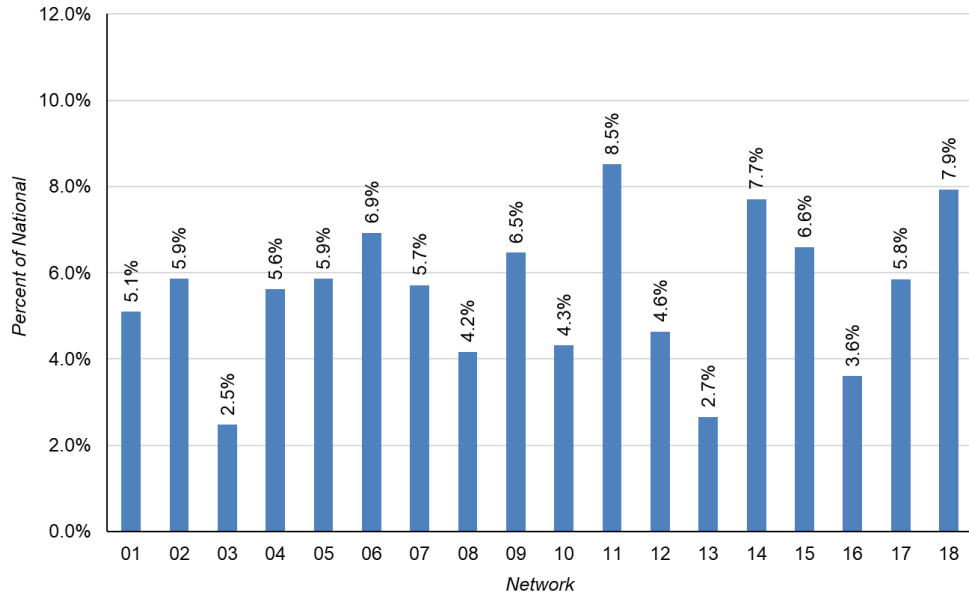
National total ESRD Medicare-certified dialysis facilities: 7,431
Source of data: CROWNWeb

Percent of Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network 2018



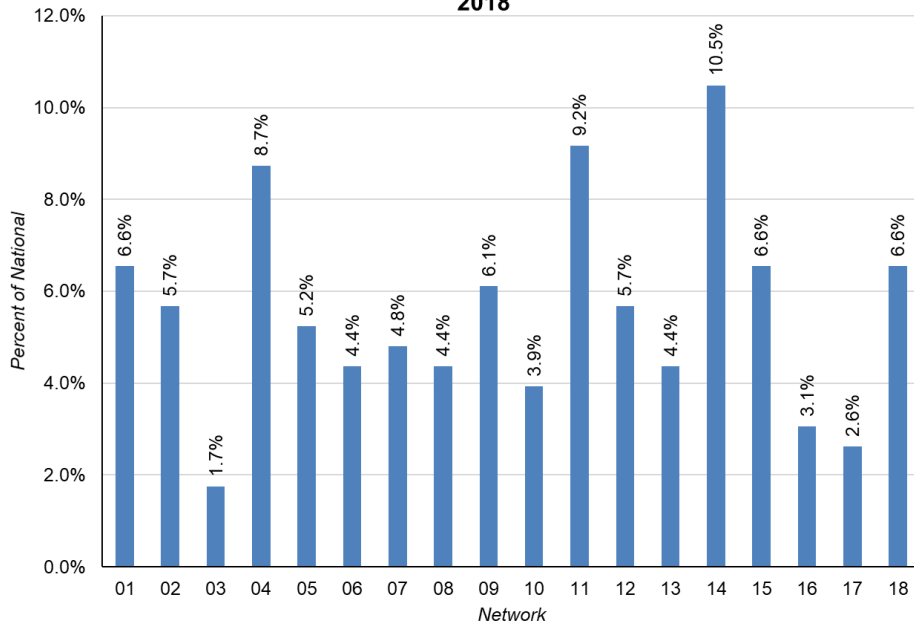
National total home hemodialysis and peritoneal dialysis patients: 61,826
Source of data: CROWNWeb

**Percent of Transplant Patients by ESRD Network
2018**



National total transplant patients: 221,497
Source of data: CROWNWeb

**Percent of Medicare-Certified Kidney Transplant Facilities by
ESRD Network
2018**



National total ESRD Medicare-certified kidney transplant facilities: 229
Source of data: CROWNWeb



ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

The Network works with individual facilities to identify and address difficulties in placing or maintaining patients in treatment. These “access to care” cases may come to the Network’s attention in the form of a grievance filed by or on behalf of the patient. In 2018 the Network:

- Addressed 43 patient grievance cases that were reported (40 Immediate Advocacy cases, one Quality of Care case, and two General Grievance cases)
- Averted 28 Involuntary Discharges
- Managed 34 Involuntary Discharges

A comprehensive analysis of grievances and access to care issues occurring in the Network’s service area from January through December 2018 revealed that the most prevalent grievance issues were staff related and treatment related. The staff related concerns dealt with communication and professionalism, while the treatment related concerns were focused on questions the patient had about the delivery of their care (i.e. start and length of treatment). After discussing the patients’ concerns with the facility, the Network developed an intervention to provide facility staff with guidance on communication techniques to better guide them in supporting their patients care.

The Network discussed with facilities the importance of establishing professional boundaries with patients. In addition the Network stressed the importance of patient centered care, reminding staff that what matters to the patient is important to understand to best assist them in their care. Another technique the Network promoted is the identification of patient’s barriers (i.e. mental health unmet needs, lack of housing, immigration, health insurance). This assists staff to learn to target that patient’s barrier to help support creating goals for each patient.

In addition the Network provided resources to facilities:

- Dialysis Patient Grievance Toolkit created by the Kidney Patient Advisory Council (KPAC) of the Forum of ESRD Networks includes resources to support patients’ understanding of how and when to escalate issues to a grievance;
- Grievance preparation worksheets; and a poster to create awareness of the resources available with a focus on improving communication early in the grievance process.

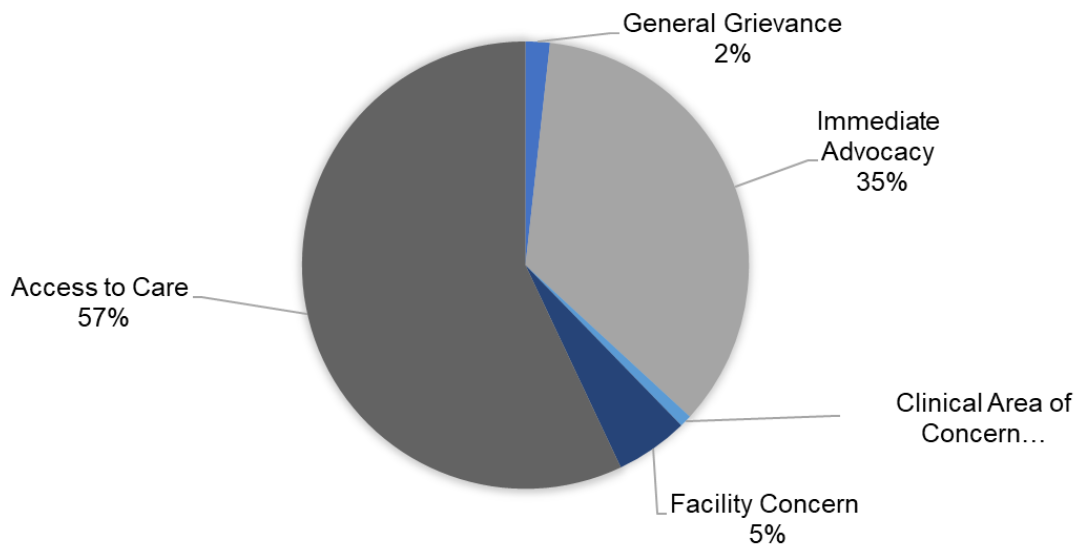
The Network responds to grievances filed by or on behalf of ESRD patients throughout New York State. This often involves working with individual facilities to identify and address difficulties in placing or maintaining patients in treatment. These access to care cases may come to the Network’s attention in the form of a grievance, or may be initiated by facility staff, in which case they are referred to as "non-grievance" cases.

Access to care cases includes those involving involuntary discharges, involuntary transfers, and failures to place. An involuntary discharge is initiated by the treating dialysis facility without the patient’s agreement. An involuntary transfer occurs when the facility temporarily or permanently closes (i.e. due to a merger, an emergency, a disaster situation, or other circumstance) and the patient is dissatisfied with the transfer to another facility. A failure to place occurs when no outpatient dialysis facility can be located that will accept an ESRD patient for routine dialysis treatment.

In these cases, the Network assists facility staff and patients through advocacy and education and by promoting patient-centered care.

- The Network averted twenty eight involuntary discharges through monthly check ins with the facility promoting:
 - Education of the patients' rights and the role of the facility.
 - Family inclusion in all meetings with the patient.
 - Clear communication to the patient related to the facility's concerns and risk of involuntary discharge.
 - Formation of a treatment plan to support the patient's identified barriers. (i.e. mental health unmet needs, lack of housing, immigration, health insurance)
 - Education of patients on the concept of boundaries to assist in reducing conflict.
 - Information about the availability of mobile crisis resources: interdisciplinary psychiatric teams that support patients in the community who have high risk mental health needs, along with encouraging facility staff to partner with other organizations that could assist facility staff in supporting patients with mental health care needs.
- The Network received thirty four cases involuntary discharges:
 - In most of the reported cases the discharge was immediate due to a severe threat. The Network worked closely with each facility to ensure that staff provided the required care after discharge. The Network also encouraged facility staff members to continue supporting the patient even after discharge, by aiding in the referral to new facilities and by assisting hospitals that were working to identify new placement for the patient.
 - The Network provided education to hospital discharge planners to help them in supporting involuntary discharges. This included information on possible solutions to finding placement, dialysis facility resources, and the 30-day Trial Program. This program allows patients to treat as a transient patient for thirty days with the permission the NYS Department of Health. At the end of thirty days the facility will either accept permanently or request an additional thirty days. The maximum amount of time that can be given is ninety days, at which time the facility will need to decide if they will accept the patient permanently.
 - The Network supported facilities in reviewing their current practices to support their patients and, when necessary, recommending a new approach to support earlier intervention when concerns arise regarding a patient; and a focus on involving patients and their families in their care from the moment of admission. The Network advised facilities to pay particular attention to patients whom isolate themselves and to those who do not have significant support in their lives, with a goal to find ways to provide these patients with additional support.

Network 2: 2018 Grievances and Non-Grievances by Case Type and Percent



Source of data: Patient Contact Utility (PCU)

ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA

Long-Term Catheter Quality Improvement Activity

Project Overview

Over the last 12 years, the Network has been successful in reducing LTC use and increasing arteriovenous fistula (AVF) placement in suitable hemodialysis patients in its service area. In 2018, the Network continued its work to improve the survival rate and quality of life for hemodialysis patients through efforts to increase the AVF in-use rates among prevalent patients. Implementing interventions that included facility-specific data feedback reports, educational webinars, and provision of staff and patient educational resources.

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 long-term catheter (LTC), as compared with fistula use, among eligible adult (≥ 18 years of age) in-center hemodialysis patients. Patients with LTCs are defined as those with catheters in use (for dialysis treatments) for 90 days or longer. Readmission rates for infections in ESRD patients are approximately 33.3% compared to 17.4% of non-ESRD patients. In addition to this, 31.1% of all-cause readmissions in the ESRD population were due to vascular access infections.¹¹

Targeted Facilities

The Network worked with 16 facilities in its service area with LTC rates ranging from 15.00% to 53.80%; targeted facilities had a LTC rate greater than 15% as reported in the September 2017 Fistula First Catheter Last (FFCL) data provided by the ESRD National Coordinating Center (NCC). To support a more targeted approach to its quality improvement interventions, the Network subdivided into three intervention cohorts the facilities participated in the project (50% of the lowest performing facilities).

Goals and Outcomes

The goal of this project was to achieve a two percentage point decrease of LTC rates in the identified cohort dialysis facilities from baseline, September 2017, through re-measure, October 2018 (July Data). The Network attained a 2.05 percentage point reduction in LTC use, going from a baseline of 21.36% to a LTC rate of 19.30% in targeted facilities.

Interventions

- The Network distributed to facilities quarterly 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 outcome trends and, if necessary, to identify barriers that were impeding progress toward the project end-goal. If additional challenges were identified, the Network worked with the facility to implement another root cause analysis (RCA) and development of an individualized corrective action plan (CAP) was required to assist the facility to implement additional action steps.
- A library of publications related to vascular access was posted to the Network's website for use by facilities. Resources included educational information for both staff members and patients. On a quarterly basis, the Network sent each facility a Publications Resource form, with which they could order printed materials. The resources and list were displayed at the Network's Annual Meeting and promoted throughout the year on webinars and during Network staff site visits.

¹¹ Soi et al. (2016). Prevention of catheter-related bloodstream infections in patients on hemodialysis: challenges and management strategies. *International Journal of Nephrology and Renovascular Disease*, 9: 319-328. Retrieved November 7, 2017, <https://doi.org/10.2147/IJNRD.S76826>

- Facility staff was provided education on using the root cause analysis (RCA) tool to identify reasons for the facility’s high LTC rate and to determine an appropriate corrective action plan (CAP). The Network encouraged each facility to identify an interdisciplinary planning team.
- Facility staff were provided an RCA tool that features the 5-Whys approach, as well as implementation plans for CDC interventions (infection control audits and training materials).
- 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 preventing patients from moving to the next step.
- The Catheter Reduction Toolkit developed by the Forum of ESRD Networks and other nationally recognized ESRD stakeholders was shared with facilities to support the LTC reduction.
- The Network provided facilities with CDC Catheter Connection and Disconnection Observation Tool, Catheter Connection Checklist, Catheter Disconnection Checklist, CDC Catheter Scrub-the-Hub Protocol, Catheter Exit Site Care Observation Tool, and the Catheter Exit Site Care Checklist. The Network required facilities to complete audits and enter results into NHSN.
- The Network required facilities to train staff on infection control, including access care and aseptic technique and to perform competency evaluation for infection prevention skills.
- A patient education poster was designed in collaboration with Patient SMEs to emphasize the importance of patients developing an access plan with their care teams.
- The Network hosted a Peer Mentorship Training Program on topics that included vascular access planning. Information and materials were shared to promote communication between patients and technicians, using common terminology and strategies to develop a vascular access plan.
- Quarterly educational webinars promoted sharing and spread of best practices employed by facilities that successfully overcame a barrier and/or had a significant decrease in their LTC rates.

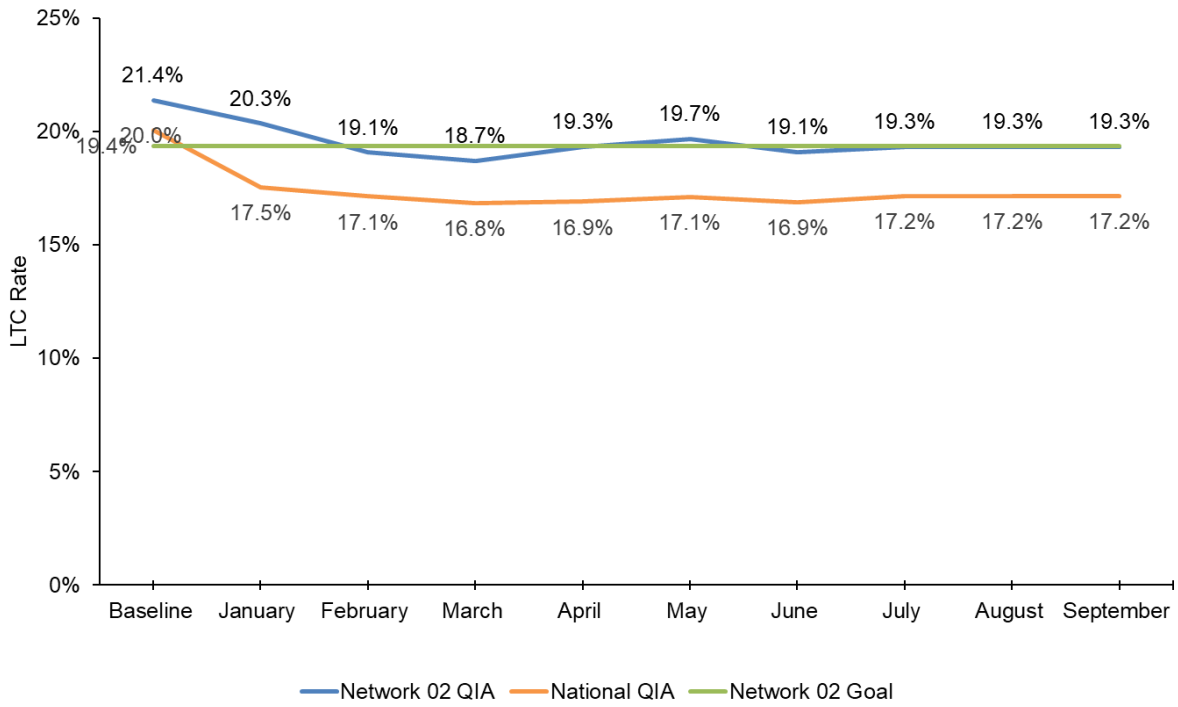
Barriers to achieving goals

- A large number of patients with LTCs are admitted to facilities with catheters due to acute emergent dialysis; this prevents the care team from planning for permanent access placement.
- In certain geographic areas within the service area there are few or no vascular surgeons specialized in dialysis access placement – creating obstacles accessing surgical intervention.
- Patient fears and apprehensions about catheter removal, vascular access surgery, body image, and needle fear cannot be overlooked as ongoing barriers.

Best practices spread to achieve goals

- By establishing patient educators who served as *Access Ambassadors* within the target facilities, the Network effectively utilized its peer mentorship training program to support educating both patients and staff on the importance and benefits of permanent access placement.
- Network staff grew to recognize that all members of the facility staff have the potential to influence or motivate a patient to get an AVF or a graft placed. Since no one can ever be certain when a patient is ready to consider an AVF, all facility staff should be prepared to talk with patients about the benefits of AVFs. To this end, the Network initiated plans to educate technicians and other facility team members to build their active listening skills, to talk effectively with patients and to direct to information on different types of vascular access.
- A barrier to increasing AVF rates identified by some facilities was limited access to skilled vascular surgeons who are able to schedule appointments in a timely manner. The Network was made aware of this issue by a facility that had lost its vascular surgeon, and had to reach out to other dialysis facilities in the surrounding area to identify surgeons who had a demonstrated history of success in placing AVFs that matured and were able to be used. By doing so, the facility was able to maintain its high fistula rate. Based on this understanding, the Network initiated future plans to develop a Network-wide vascular surgeon guide.

**Network 02: Long-Term Catheter Rates for Quality Improvement
Activity (QIA) Facilities with National QIA Rate Comparison
January 2018 - September 2018**



Source of data: October 2018 ESRD Network Dashboard

Blood-Stream Infection Quality Improvement Activity

Project Overview

IPRO End-Stage Renal Disease (ESRD) Network of New York supports the national initiative to reduce the rate of bloodstream infection (BSI) by 50% over the next five years. To aid in achieving this goal the Network worked with 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, 2017).

Infections are the second leading cause of death in patients with ESRD. Dialysis patients are at a higher risk of acquiring Health Acquired Infections (HAI), BSIs, and/or sepsis than the general population due to the regular and frequent accessing of their blood through the use of catheters and other vascular accesses. The costs associated with HAIs are staggering. Published reports have estimated that HAIs are responsible for more than \$28 billion in yearly national healthcare expenditures for all patients in the United States. The average cost of hospitalization per episode of sepsis is approximately \$22,000.¹² Furthermore, readmission rates for infections in ESRD patients are approximately 33.3% compared to 17.4% of non-ESRD patients. According to the Dialysis Facility Report for Fiscal Year (FY) 2018, 12.7% of dialysis patients in New York were hospitalized due to BSIs compared with the national average of 10.9%. The same report revealed that the mortality rate due to infections was 15.9% in New York, compared with the national rate of 11.7%.

Targeted Facilities

After a comprehensive analysis of both NHSN BSI data from the first and second quarters of 2017 and NCC LTC-provided June 2017 FFCL data, the Network selected 60 facilities with infection rates ranging from 0.74 to 5.00 per 100 patient-months. In addition, the Network worked with 30 of the facilities within the 50% BSI cohort to support their efforts to join a Health Information Exchange (HIE) (or another evidence-based, effective information transfer system as approved by the COR and SME) to facilitate transfer of information relevant to positive blood cultures during transition of care.

To support a more targeted approach to its quality improvement interventions, the Network created three intervention cohorts for facilities participating in the project (50% of the lowest performing facilities in the Network's service area). Network staff worked with each of these cohorts on a specific quality improvement measure. The three cohorts are as follows:

- **Cohort 1:** Top 50% Facilities with Highest BSIs and LTC Rates >15%
- **Cohort 2:** Top 20% Facilities with Highest BSIs within Cohort 1
- **Cohort 3:** Facilities with LTC Rates >15%

Goals and Outcomes

The goal of this QIA was to decrease BSI rates during a re-measurement six-month intervention period (January-June 2018) and to achieve a 20% percent relative reduction in the pooled mean BSI rate for the targeted facilities. The Network succeeded in decreasing the pooled mean BSI rate (from 1.15% at baseline to 0.75% at re-measurement); yielding a 35% relative reduction.

Interventions

The project included a re-measurement intervention period of six months (January-June 2018). Network strategies included the following activities:

¹² Soi et al. (2016). Prevention of catheter-related bloodstream infections in patients on hemodialysis: challenges and management strategies. *International Journal of Nephrology and Renovascular Disease*, 9: 319-328. Retrieved November 7, 2017, <https://doi.org/10.2147/IJNRD.S76826>

- The Network worked with targeted facilities to complete a root cause analysis (RCA) “autopsy” (using the *5-Whys* Tool) for each infection identified during the baseline period. The *5-Whys* approach allowed users to identify the root cause-and-affect relationships and a facility-developed corrective action plan (CAP) to address the identified root cause barriers.
- The Network provided facilities with a fillable tool to post their BSI rates and their LTC counts monthly throughout the project, and ask that these results be posted in a prominent area for staff to review. This provided staff with important feedback about progress and illustrated the need to continue and sustain improvements.
- The Network worked with those responsible for infection control monitoring at the facility to ensure that the yearly training about BSI reporting was completed and entered in NHSN. Additionally, these managers were introduced to the PDSA cycle through performance of a RCA about past infections, discussion of infection control and LTC reduction during Quality Assurance Performance Improvement (QAPI) meetings, monthly activity reporting to the Network, and QAPI presentations.
- The Network collected from facilities, monthly summary reports detailing facilities’ successes, challenges, and overall clinical observations. Likewise, the Network reviewed and monitored facility data collected from CDC audits during specified intervention months and self-reported in NHSN.
- The Network distributed educational materials and resources available on the CDC website, and requested feedback in the form of quizzes and or audits to ensure material utilization.
- A staff-facing poster, Core Interventions for Dialysis BSI Prevention, made available by the CDC, outlines nine focus areas that the CDC recommends facilities implement in their approach to preventing BSIs. The Network required the selected facilities to implement monthly interventions based on the nine focus areas. Each month during the QIA project three of the nine focus areas were highlighted by the Network as a focused intervention topic.
- Facility staff required to attend ESRD National Coordinating Center National HAI Learning and Action Network (LAN) meetings with stakeholders, staff from other dialysis facilities, and Patient Subject Matter Experts (SMEs). Meetings featured experts in the area of BSI/LTC reduction and were conducted in an all-teach, all-learn environment.

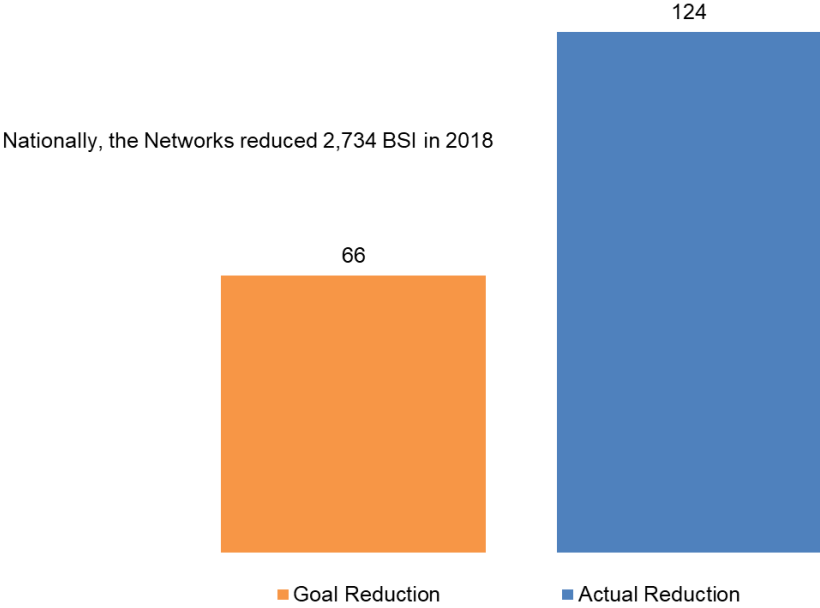
Barriers to achieving goals

- A large number of patients were admitted to with a catheter to dialysis facilities from hospitals causing a higher risk of BSI. The inability to control and monitor patient hygiene outside of the dialysis facility sometimes resulted in the spread of infection.
- When barriers or areas for improvement were identified through the Plan-Do-Study-Act (PDSA) cycle, the Network implemented interventions for the following month that addressed issues identified in the facility-conducted RCA.

Best practices spread to achieve goals

- To support achieving BSI reduction goals, the Network promoted use of patient success stories and CDC core intervention resources, which included an educational poster and accompanying resources focused on nine components to prevent infections in a dialysis setting.
- Implementation of the Hand Hygiene All-Star campaign served to educate patients about hand hygiene techniques endorsed by the CDC and the World Health Organization (WHO). Also identified as a best practice was the sharing of other educational materials and resources from the CDC, Making Dialysis Safer Coalition and the Forum of ESRD Networks as nationally recognized ESRD stakeholders.
- Network interventions promoted implementation of the CDC recommended audit tools; involved patient subject matter experts in directing the interventions; and included provision of data trending reports for each facility’s performance and one-to-one coaching for low performing facilities.

Network 02: Reduction in Bloodstream Infections (BSI) in QIA Facilities

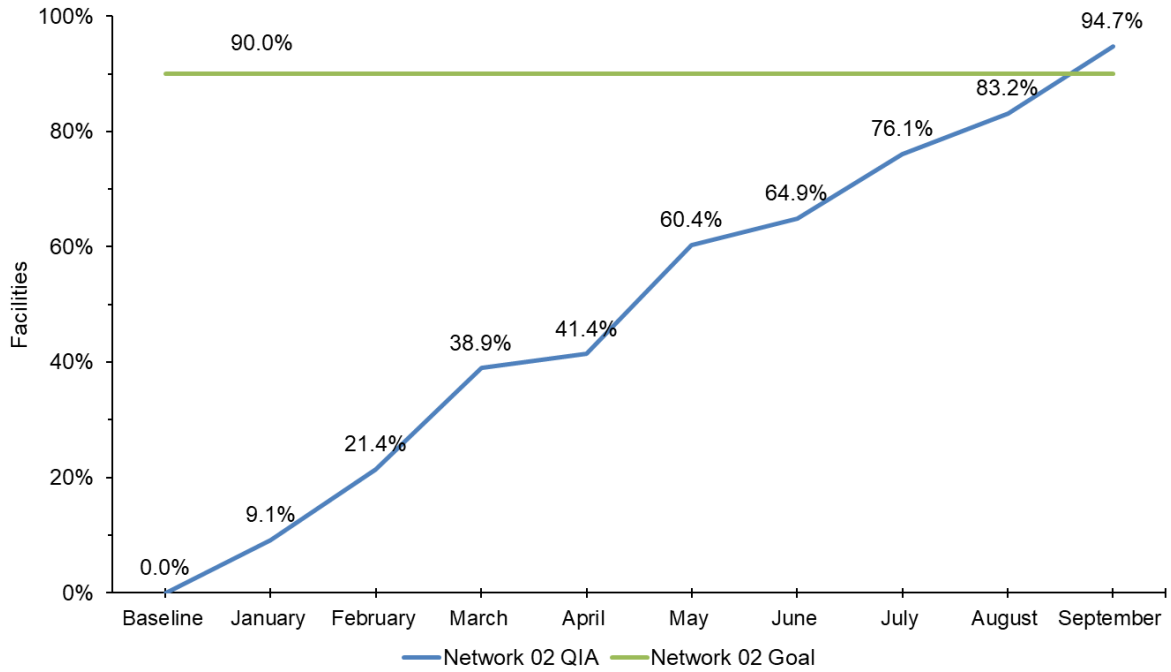


The Network goal was to decrease the rate of BSI by 20% or greater relative reduction in the pooled semi-annual mean in facilities participating in the QIA

QIA: Quality Improvement Activity

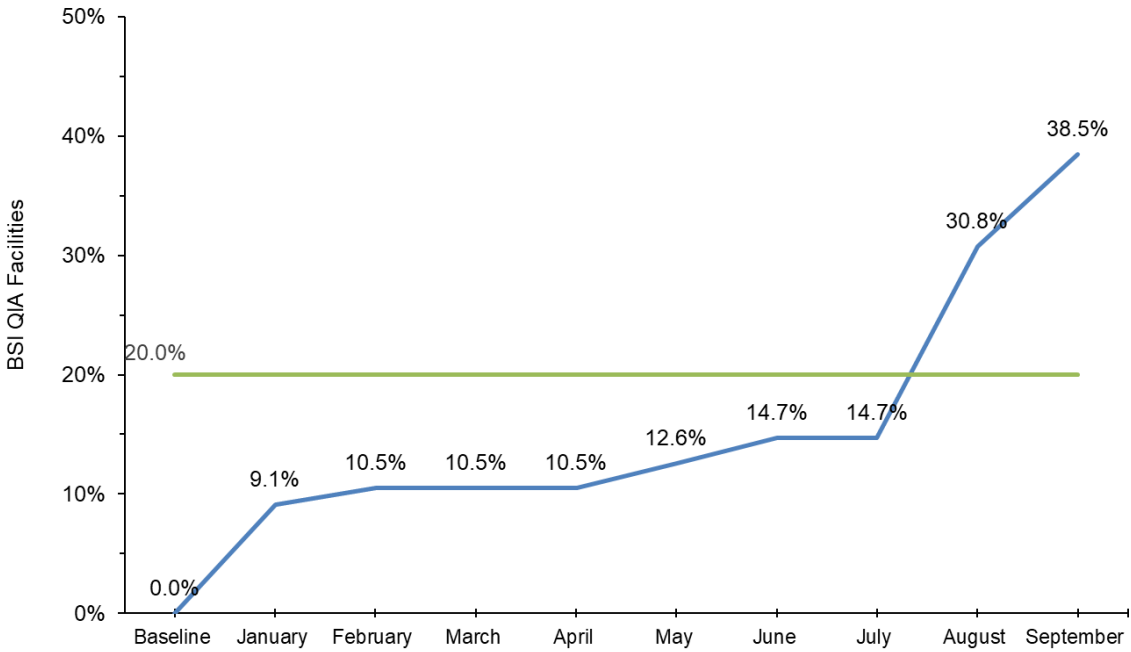
Source of data: National Healthcare Safety Network (NHSN) January 2018 - June 2018 compared to January 2017 - June 2017

Network 02: Percent of Dialysis Facilities that Have At Least One Person Who Has Completed the NHSN Dialysis Event Surveillance Training
January 2018 - September 2018



Source of data: October 2018 ESRD Network Dashboard

**Network 02: Percent of BSI QIA Facilities with a Health Information Exchange
or Evidence-Based Highly Effective Information Transfer System
January 2018 - September 2018**



QIA: Quality Improvement Activity — Network 02 QIA — Network 02 Goal
 BSI: Bloodstream Infection
 Source of data: October 2018 ESRD Network Dashboard

Transplant Waitlist Quality Improvement Activity

Project Overview

Although transplantation options and transplant referrals are required by the Conditions for Coverage (ESRD CfCs), for dialysis facilities, there continues to be barriers to the transplant referral of interested patients. In 2018, Network staff designed a quality improvement activity to improve individual dialysis facility transplant referral rates, to overcome barriers in any identified disparate groups, and tailor interventions to ensure that all interested and suitable patients are given the opportunity for transplant as a treatment option.

Targeted Facilities

The Network was able to achieve a 6.37 percentage point improvement in the transplant referral rate at the 92 targeted facilities. These facilities were targeted due to their low transplant referral rates, and improvement was achieved through patient and staff education, and process improvement including efforts to improve communication and coordination between dialysis facilities and transplant center programs.

This project worked to bridge the gaps between dialysis facility and transplant center care settings, focusing on overcoming known variables in the transplant coordination process; such as, patient health status, patient eligibility, varying referral options by transplant facility, transplant center program criteria, and, availability of donors. By improving the transplant referral coordination process, taking into consideration these contributing factors and addressing the perceived barriers between providers and patients; it was found to help increase transplant referrals, wait listing, and ultimately the patient opportunity to achieve transplantation.

Goals and Outcomes

The Network attained a 6.37 percentage point improvement in the number of patients on the transplant waitlist in the targeted 30% of facilities in the QIA, but this improvement did not meet the CMS goal of a 10 percentage point improvement. There was an early issue with data delivery to the Network for analysis and trending, which hampered Network staff's ability to perform rapid cycle improvement. As this was an issue for all 18 ESRD Networks nationally, CMS considered qualitative information as part of the Network's evaluation goal, and based upon the qualitative work of the QIA, the Network was scored as having passed the QIA upon evaluation by CMS.

Interventions

As part of an overall continuous quality improvement initiative Network staff worked with targeted facility staff to ensure that a facility level RCA was conducted at the launch of the QIA to establish facility level awareness of unique barriers and identification of resources to overcome the barriers to transplant referral. The Network structured interventions to ensure that providers were aware of efficient techniques for talking to patients about transplant as an option, through patient mentor educators, serving as transplant navigators. As a long-term strategy to sustain the success of the project, the Network implemented a train-the-trainer approach, whereby Network-trained Patient Advisory Council (PAC) Chair mentors worked with facility staff to provide education to interested patients.

Support was provided to facilities as they were asked to develop a dedicated visual display/resource area, the Transplant “Education Station”, this intervention culminated with a multi-QIA *Education Station* photo contest that drew 93 facility entries and resulted in the top 15 contest finalists. Patient SMEs and PAC members voted on the winner. Subsequently, the winning facility’s transplant QIA project lead presented to the community on their facility’s work in engaging and educating patients about transplant as a treatment option as a best practice model.

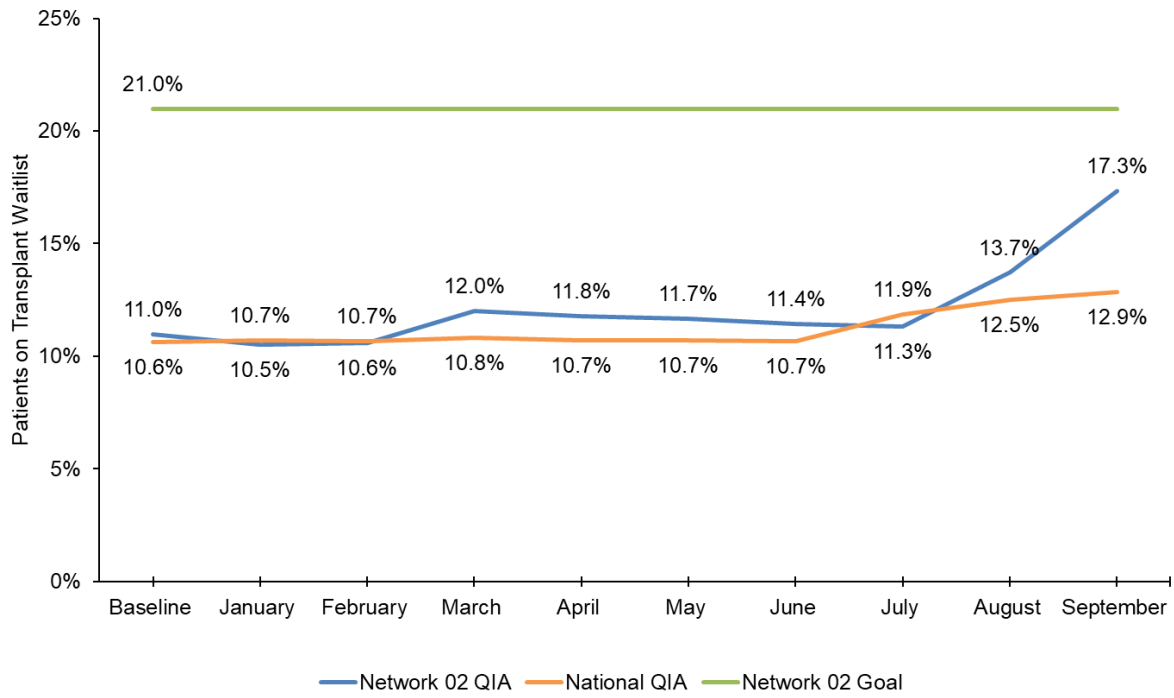
Prior to 2018, the Network assembled a Transplant Advisory Committee to bridge communication gaps, address barriers in data collection and support dialysis facility/transplant center inconsistent reporting. In 2018, this Network-developed Committee joined with a newly formed state funded, non- profit, New York Center for Kidney Transplantation (NYKidney), to overcome communication breakdowns between dialysis facilities and transplant centers. This partnership became the first state-level, non-profit partner consortium that the Network has been a part of developing, and is now a sustainable transplant focused stakeholder dedicated to enhancing the quality of kidney transplant services.

During the nine month QIA performance period, Network staff worked with other Networks, the ESRD NCC and other stakeholders to provide educational webinars to facilitate sharing of best practice models, educational articles, resources, and recommendations for intervention improvement among participating facilities.

Best practices spread to achieve goals

- A strategy in which dialysis facilities developed working relationships with the transplant center was vital to ensuring involvement of transplant facility staff in providing patient education at the dialysis facility level.
- Utilizing the Network’s *Eligibility Criteria List* for Transplant Centers; the most widely requested Network tool in 2018, helped to provide patients, family members, care partners and provider staff with a resource to discuss transplant options. The list also provided and co-morbidity absolute and modifiable exclusions to transplant for each transplant center.
- Regularly monitoring patient transplant status (monthly): Facility staff reported that maintaining a current list of patient transplant status (Interested, referred, in process, listed and/or inactive) was important to ensuring that 100% of the patient population was screened, educated and referred on a regular basis.

Network 02: Percent of Patients from QIA Facilities on the Transplant Waitlist
January 2018 - September 2018



QIA: Quality Improvement Activity
 Source of data: October 2018 ESRD Network Dashboard

Home Therapy Quality Improvement Activity

Project Overview

A diagnosis of ESRD requires life-sustaining kidney replacement therapy. Patients with ESRD have several treatment options, including in-center hemodialysis, home hemodialysis, peritoneal dialysis or transplantation. Home dialysis (hemodialysis or peritoneal dialysis) offers several benefits for the patient, including improved patient outcomes, increased quality of life, flexible treatment schedules, and reduced costs associated with travel to the dialysis unit, and a feeling of being in control. With that said, home dialysis continues to be underutilized.

According to the CMS ESRD CfCs, dialysis practitioners are responsible for educating their patients about treatment modalities. In addition, the CfCs state that a patient must have an "evaluation of the preferred modality," which means that all modality options (hemodialysis, peritoneal dialysis) and settings (in-center, home) are presented to each patient and that the patient's goals, preferences, and expectations are given priority in decision-making. The patient's plan of care must incorporate the interdisciplinary team's evaluation of the patient's suitability for home dialysis.

Targeted Facilities

In 2018, Network staff identified an opportunity for improvement in the launching and management of quality improvement activities: After having been trained in Lean management, Network staff, streamlined the interventions and reporting for the Home Therapies QIA and the Transplant QIA. This new streamlined process not only reduced facility staff QIA reporting burden, but also increased the reach of Network QIA interventions and activities by exposing not just the 90 targeted Home Therapies QIA facilities, but also the 92 Transplant QIA facilities. In July, a combined "Treatment Options" newsletter was launched, to promote activities and interventions with resounding success; it was the highest rated activity in the QIAs for 2018.

Goals and Outcomes

Network 2 attained a 4.37 percentage point improvement in the number of patients in training for a home modality in the targeted 30% of facilities in the QIA. This improvement did not meet the CMS goal of a 10 percentage point improvement.

Interventions

As with all QIAs, the Network launched the Home Therapies QIA with an initial activity – a facility level root cause analysis conducted to establish facility level awareness of unique barriers and identification of resources to overcome the barriers to home therapies utilization. Following that activity the Network implemented the following interventions:

- Web-based in-service training for staff at targeted facilities;
- Virtual and on-site visits by the Network team to educate staff and talk to patients in facilities that did not demonstrate improvement during the project period;
- Implementation of the monthly Home Therapies Report Card to:
 - identify individual facility goals,
 - enable monthly tracking and reporting of patients' progress on the "7 Steps" for preparing patients for home dialysis training, and
 - review best practices and barriers to progress;
- Development and launch of the Technician Home Therapies Navigator Training Module;

- Collaboration with patient Subject Matter Experts (SMEs), the ESRD NCC Home Dialysis Learning and Action Network (LAN), stakeholders, the State Survey Agency, LDO management, independent providers and local and national patient groups;
- Support was provided to facilities as they were asked to develop a dedicated visual display/resource area, the Home Therapies “Education Station.” This intervention culminated with a multi-QIA Education Station photo contest that drew 93 entries and resulted in 15 finalists, with patient SMEs and PAC members voting on the winner. Although the winning facility was not a part of the Home Therapies QIA, its facility transplant lead presented to the community the facility’s best practices in engaging and educating patients as part of the Network’s QIA program.

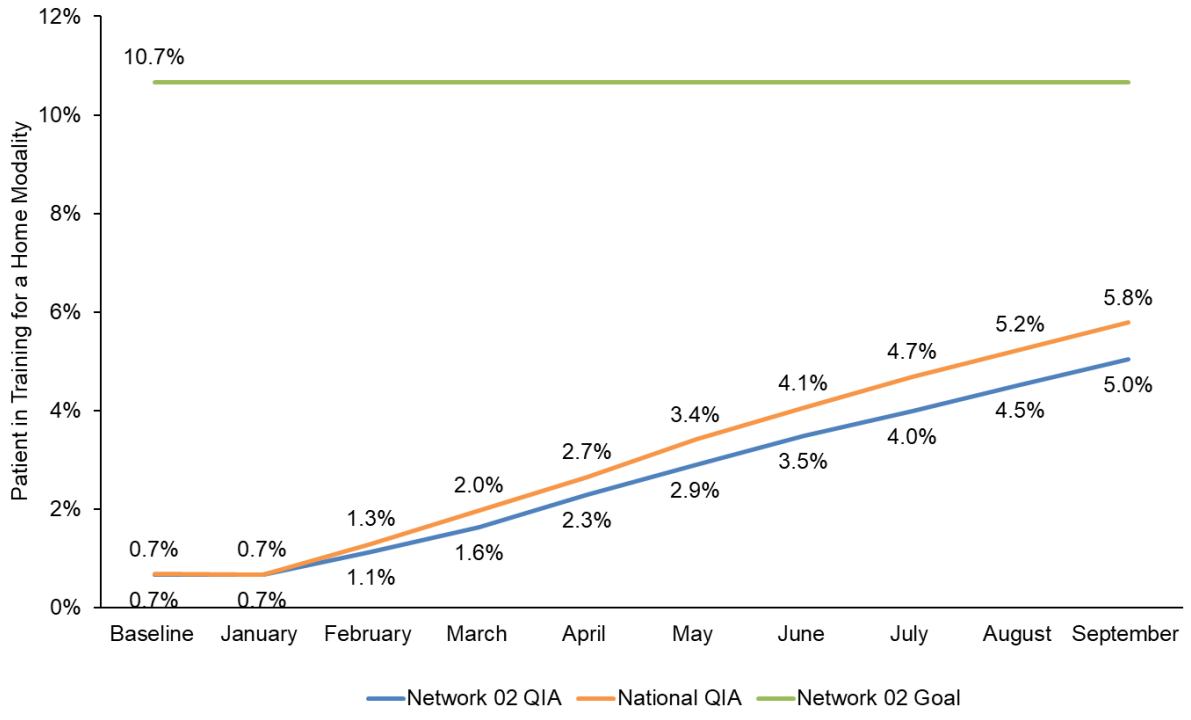
Barriers to achieving goals

- An issue early in the project that delayed data delivery to the Network for analysis and trending hampered the Network’s ability to conduct rapid cycle improvement. As this lag in data availability affected all 18 ESRD Networks, CMS considered qualitative information as part of the Network’s evaluation goal. CMS’ evaluation of the Network’s qualitative work for the QIA resulted in the Network receiving a passing score.

Best practices spread to achieve goals

- ESRD NCC LAN Webinars with Continuing Education: These webinars were invaluable to the community (as evidenced by facility staff members rating the effectiveness of this intervention >90% successful impact), and provided information, resources and the opportunity for peer-to-peer motivation and encouragement amongst dialysis facility staff.
- These bi-monthly meetings resulted in the implementation of the following ESRD NCC Home Modality LAN Interventions, which scored >90% success rating from targeted QIA facility staff:
 - Promote home dialysis (Create a space and theme to ensure that all staff members are offering the option of home therapies to patients, care partners and family members.)
 - Develop home modality education/exposure for incident patients during the first 90 days of dialysis.
 - Network staff worked to identify additional interventions to overcome identified barriers to home therapies utilization. Each intervention was reviewed by staff and patient SMEs. After implementation of each intervention, QIA facilities were required to provide feedback, using a Likert score evaluation and suggestions for improvement or best practices in utilization.
 - The following Network interventions scored a >90% success rating by targeted QIA facility:
 - Network Educational Toolkit (a collection of posters, pamphlets and flyers to promote home therapies);
 - Facility virtual site visits (Network staff used WebEx technology to meet with facility staff and patient representatives to discuss QIA requirements, activities, reporting and trends towards goals).

Network 02: Percent of Patients from QIA Facilities in Training for a Home Modality January 2018 - September 2018



QIA: Quality Improvement Activity
Source of data: October 2018 ESRD Network Dashboard

Population Health Focus Pilot Project Quality Improvement Activity

Project Overview

The goal of this QIA project was to assist ESRD patients with seeking gainful employment and/or returning to work. The Network worked with 10% of the dialysis facilities in its service area to help improve the utilization of the services provided by the New York Adult Career and Continuing Education Services: Vocational Rehabilitation (ACCES-VR) agency and employment networks (ENs).

Targeted Facilities

The Network worked with 10% of dialysis facilities in the Network service area; 31 facilities selected. Patients between the ages of 18 and 54 were targeted for interventions. The Network identified gender as the disparity in the initial baseline review of the 9,155 patients in the identified facilities. The disparity assessment was completed on the four disparate groups with age being eliminated due to the patient population being between 18 and 54. In addition the Network was unable to identify the gap in the urban vs rural disparity due to there being no facilities/patients located in rural locations in the selected facilities. After reviewing the remaining three disparities (Ethnicity, Gender and Race), it was determined that gender had the highest disparity gap (5.076%).

Goals and Outcomes

The Network's was to identify a minimum of five (5) employment networks and/or the state vocational rehabilitation (VR) agency that serves the recruited patient population. The goals of the QIA were to achieve the following results from the baseline period (October 2016 through June 2017) to re-measurement (September 30, 2018):

- 5 percentage point improvement of patients referred to an Employment Network (EN) or a State Vocational Rehabilitation (VR) agency.
- 2 point percentage improvement of patients utilizing the services of Employment Network or State Vocational Rehab services.
- Decrease in the disparity gap.

The Network exceeded the referral rate goal increasing from a baseline of 3.90% to 12.44%. Due to facility barriers and population challenges, the Network did not meet the CMS goal for service utilization, however, did generate a 0.24% improvement, increasing from baseline of 1.63% to 1.87%

Interventions

- Initial RCA to be completed by each facility
- Monthly qualitative surveys
- Introduction of smart goals materials, employment network materials, vocational rehab resources, Veteran's Administration resources, and Ticket to Work Program information
- Implementation of the Smart Goals into the dialysis facility VR referral process
- Collaboration with the Employment Networks to support the needs of the ESRD community
- Monthly patient focus group calls
- Bi-monthly ESRD NCC Learning and Action Network Webinars

Barriers to achieving goals

- Accessibility of transportation for patients
- Lack of follow up during annual care plan meeting to obtain patient's current employment status
- Patient lack of follow through with referral

Best practices spread to achieve goals

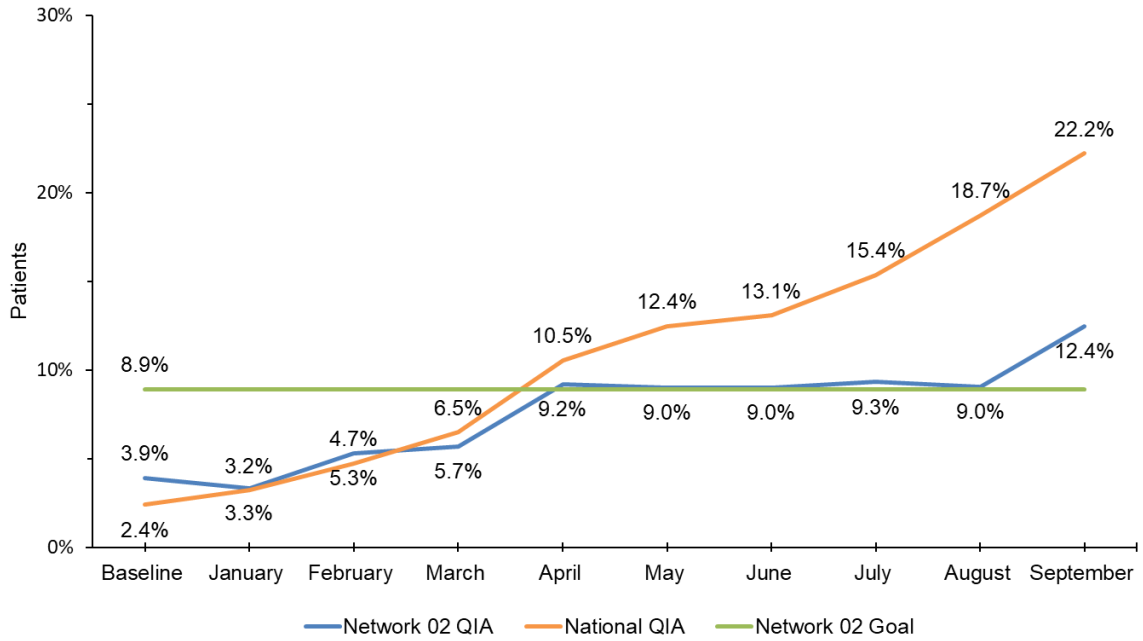
Target facilities indicated that the project changed the way in which they supported patients with vocational rehabilitation services identified the following as a best practice:

- Identification of patients in the facility age 18-54 and supplementing the annual care plan with questions related to vocational rehabilitation

Facilities were asked how the project changed the way in which they support patients eligible for vocational rehabilitation services.

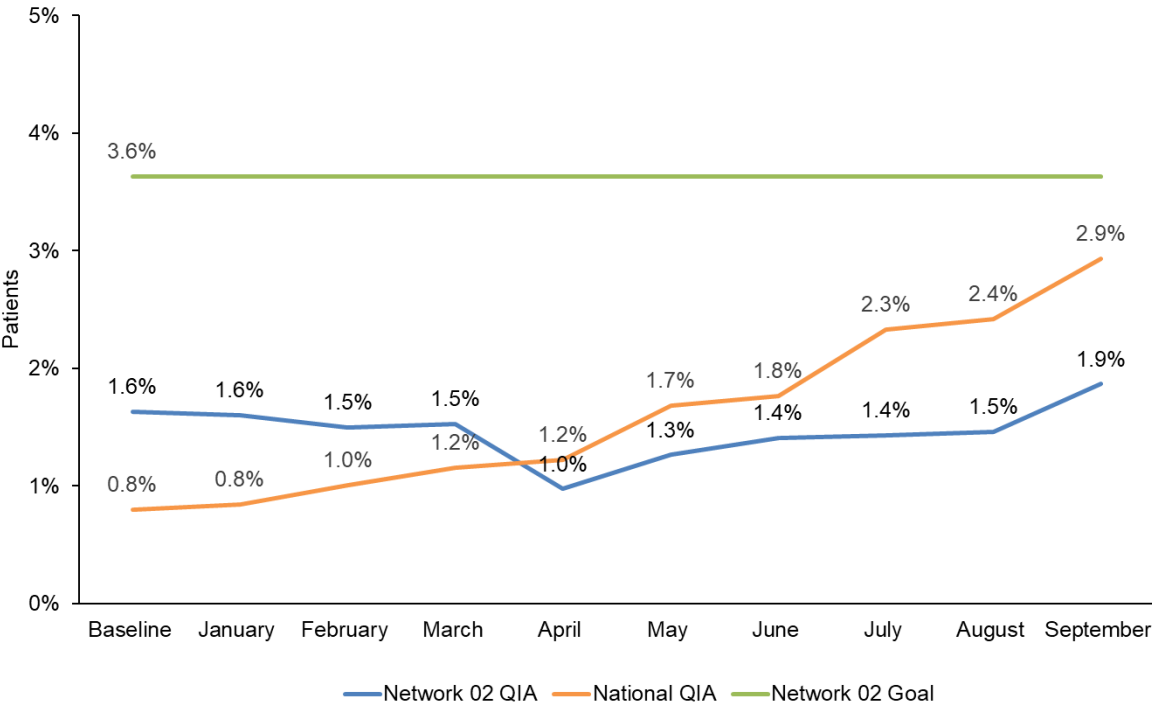
- 45% indicated that they now update patient's CROWNWeb VR status on a regular basis (monthly/quarterly/annually).
- 38% said that they now offer vocational rehab education to every new patient at our facility.
- 30% reported that they now post information about vocational rehabilitation services in their lobbies.
- 35% indicated that they now ask patients at monthly or annual assessments about their interest in going back to work.
- 35% said that they now educate every patient on a 1:1 basis about the resources available to go back/continue work.

**Network 02: Percent of Patients from QIA Facilities Referred to an
Employment Network or a Vocational Rehabilitation Agency
January 2018 - September 2018**



QIA: Quality Improvement Activity
Source of data: October 2018 ESRD Network Dashboard

**Network 02: Percent Patients from QIA Facilities Receiving Services from the Employment Network or Vocational Rehabilitation Agency
January 2018 - September 2018**



QIA: Quality Improvement Activity
Source of data: October 2018 ESRD Network Dashboard

ESRD NETWORK RECOMMENDATIONS

The Network did not identify any facilities in its service area that failed to cooperate with Network goals in 2018. No recommendations were made to CMS for sanctions or additional services or facilities in the Network service area during 2018.

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 relies on longstanding partnerships with The Kidney Community Emergency Preparedness Coalition (KCER), state and city health departments, offices of emergency management, and emergency preparedness coalitions to ensure safety and continuity of care for ESRD patients throughout New York State.

For all emergencies reported in 2018, Network staff offered comprehensive support to patients and linked healthcare practitioners to appropriate resources, including the KCER program, local and New York State Offices of Emergency Management, and other stakeholders, as appropriate. The Network worked with facilities to ensure that all information about “closed” or “altered” status was reported to the Network. The Network also ensured that facilities reported to the New York State Department of Health (via the New York Patient Occurrence and Tracking System [NYPORTS], the state's adverse event reporting system) any event that caused delayed or cancelled treatments.

In 2018, the Network successfully managed 42 emergency events that required intervention, response, and/or tracking. These events accounted for 38 total calendar days of facility closures and 60 schedule alterations.

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.