**End-Stage Renal Disease
Network of New England**

IPRO

2019 Annual Report

Boston, Massachusetts

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ESRD DEMOGRAPHIC DATA

IPRO ESRD Network of New England (Network 1) is one of four ESRD Networks managed by IPRO, a non-profit organization that works with government agencies, providers, and consumers to implement innovative programs that improve healthcare. In addition to serving as the ESRD Network of New England, IPRO manages the ESRD Network of New York, 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 the more than 132,000 renal patients in the four Network areas it manages.

IPRO supports nearly 100 state and federal programs and is contracted by the Centers for Medicare & Medicaid Services (CMS) as the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for the New England States, New York, New Jersey, Ohio, Maryland, Delaware and the District of Columbia.

Network 1 serves ESRD patients, dialysis providers, and transplant centers in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The role of the IPRO ESRD Network of New England is to improve the quality of care for people who require dialysis and/or transplantation, for ESRD. The Network aligns its mission and activities with the National Quality Strategy's three broad aims and CMS' priorities for the ESRD Network Program. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

New England's 14.8 million residents are distributed over approximately 72,000 square miles. Its six states differ widely in terms of geography, population density, and socio-economic factors, all of which influence the availability of services, treatment choices, and quality of care for ESRD patients. For example, Maine is the largest New England state but it has the lowest population density, which presents a challenge for ESRD patients who may have to travel long distances to reach the nearest dialysis facility.

Of the total population of New England in 2019, 78% resided in the three southernmost states (Connecticut, Massachusetts and Rhode Island), which also have the greatest number of metropolitan areas. The remaining 22% resided in the three northernmost states (Maine, New Hampshire and Vermont), which are primarily urban and rural and had the fewest dialysis facilities.
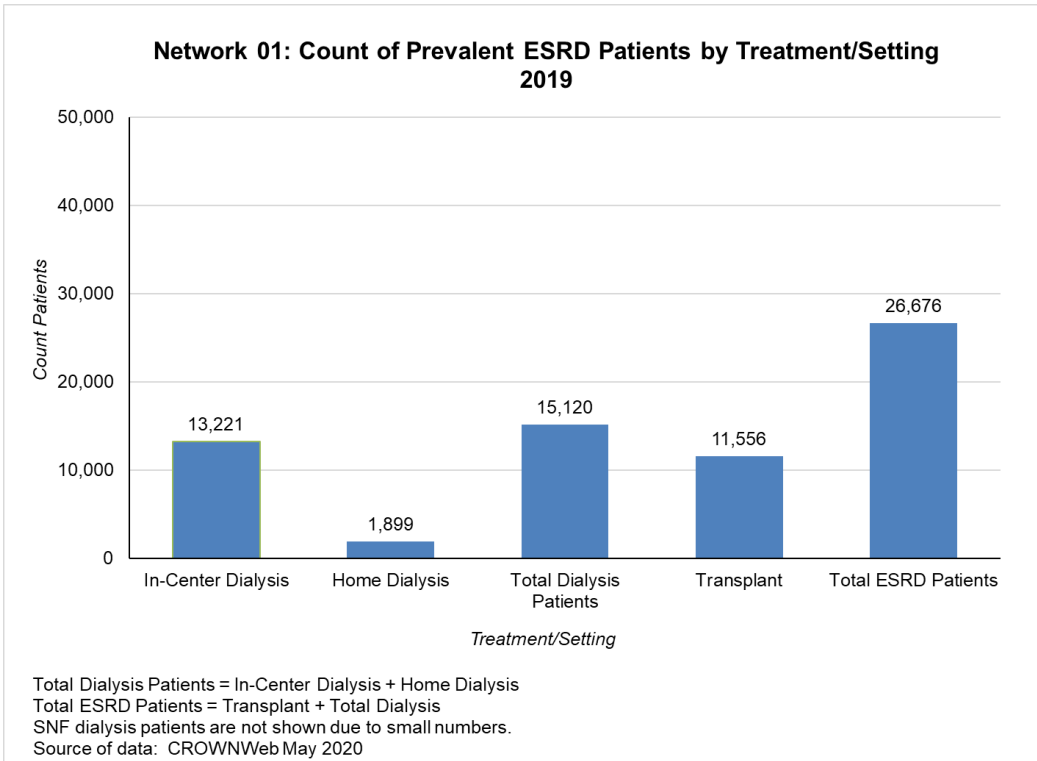
According to the U.S. Census Bureau estimates for 2019, New England's population was 83.78% white, 7.97% African American, 5.20% Asian, and 0.56% American Indian and Alaska Native. The Latino population represents 11.40% of the population. With the exception of African American and white ESRD prevalent patients in 2019, at 21.79% and 73.78% respectively, data for the remaining U.S. Census Bureau populations closely aligned with the distribution of ESRD patients in New England.

The ESRD population in the Network's service area was the second smallest in the country as of December 31, 2019, according to ESRD National Coordinating Center (NCC) end-of-year data. As of December 2019, 15,210 prevalent patients were reported as receiving dialysis treatment from facilities in the Network service area. This is a 1.6% increase from 14,967 patients dialyzing in 2018. There were 4,147 incident patients in 2019, which is a 2.3% increase from the 4,051 patients that started treatment in 2018. These patients were served by 200 Medicare-certified dialysis facilities, which included four Veterans Affairs (VA) hospitals and 15 transplant centers. Despite the increase in patient population during 2019, the number of operating Medicare-certified dialysis facilities in the New England region
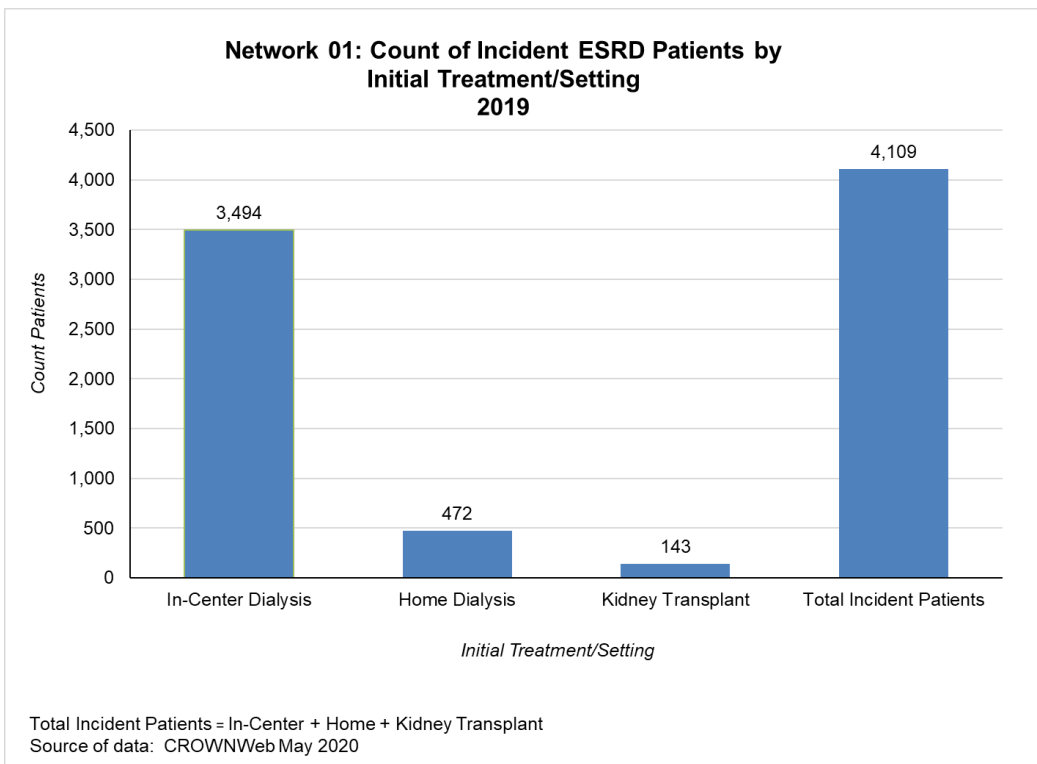
decreased by 1.0%, from 202 in December 2018. Sixty-one (30.5%) dialysis facilities in the Network's service area provided evening services in 2019. Access to care after normal business hours can greatly improve quality of life for ESRD patients who are able to work full-time while receiving treatment.

In 2019, the Network worked in collaboration with its Network Council, Medical Review Board, Patient Advisory Committee, Grievance 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 care partners, nephrologists, dialysis facilities and other healthcare organizations, ESRD advocacy organizations, and other ESRD stakeholders to improve the care for ESRD patients throughout New England.
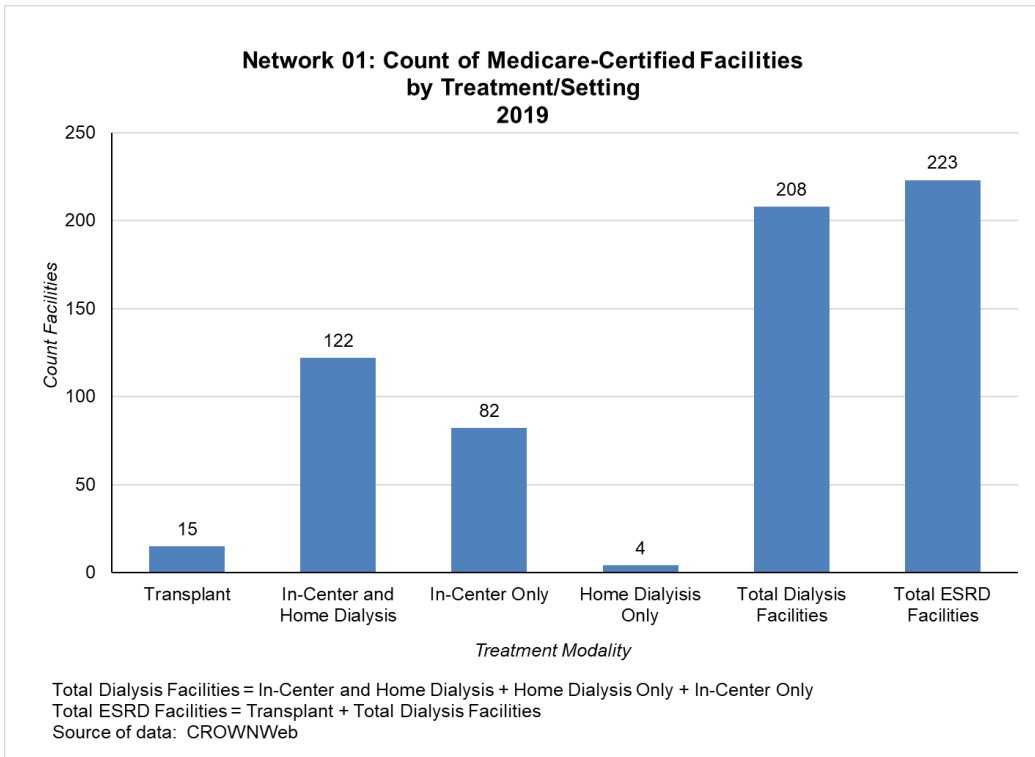
The Network deployed interventions that targeted patients, dialysis and transplant providers, and other stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of care for ESRD patients are detailed in this report.

Network 01: Count of Prevalent ESRD Patients by Treatment/Setting 2019

Chart showing Count Patients (y-axis) by Treatment/Setting (x-axis):
- In-Center Dialysis: 13,221
- Home Dialysis: 1,899
- Total Dialysis Patients: 15,120
- Transplant: 11,556
- Total ESRD Patients: 26,676

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

Source of data: CROWNWeb

Network 01: Count of Incident ESRD Patients by Initial Treatment/Setting 2019

Chart showing Count Patients (y-axis) by Initial Treatment/Setting (x-axis):
- In-Center Dialysis: 3,494
- Home Dialysis: 472
- Kidney Transplant: 143
- Total Incident Patients: 4,109

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

Source of data: CROWNWeb

Network 01: Count of Medicare-Certified Facilities by Treatment/Setting 2019

Count Facilities by Treatment Modality:
- Transplant: 15
- In-Center and Home Dialysis: 122
- In-Center Only: 82
- Home Dialyisis Only: 4
- Total Dialysis Facilities: 208
- Total ESRD Facilities: 223

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

Source of data: CROWNWeb

Percent of National Prevalent Dialysis Patients by ESRD Network 2019

Network	Percent of National
01	2.9%
02	5.8%
03	4.0%
04	3.9%
05	5.4%
06	9.7%
07	6.2%
08	5.5%
09	6.5%
10	4.0%
11	5.5%
12	3.3%
13	4.0%
14	10.3%
15	5.1%
16	3.0%
17	5.7%
18	9.3%

National total dialysis patients: 530,311
Source of data: CROWNWeb May 2020

Source of data: CROWNWeb

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Percent of National Incident Dialysis Patients by ESRD Network
2019

Network	Percent
01	3.1%
02	6.2%
03	4.0%
04	4.1%
05	5.3%
06	8.7%
07	6.8%
08	5.3%
09	7.2%
10	4.0%
11	5.9%
12	3.6%
13	4.1%
14	9.9%
15	5.2%
16	3.1%
17	5.2%
18	8.3%

National total incident patients: 131,326
Source of data: CROWNWeb May 2020

Source of data: CROWNWeb

Percent of Medicare-Certified Dialysis Facilities by ESRD Network
2019

Network	Percent
01	2.7%
02	4.2%
03	3.3%
04	4.7%
05	5.9%
06	10.2%
07	6.5%
08	6.3%
09	8.5%
10	4.5%
11	6.7%
12	4.5%
13	4.5%
14	9.8%
15	4.9%
16	3.0%
17	4.2%
18	5.7%

National total ESRD Medicare-certified dialysis facilities: 7,752
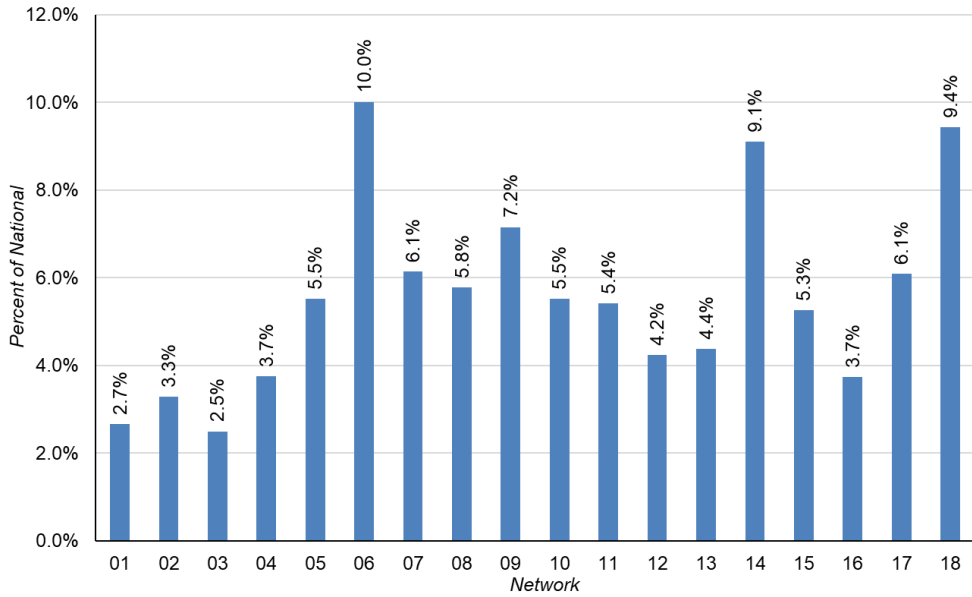Source of data: CROWNWeb May 2020
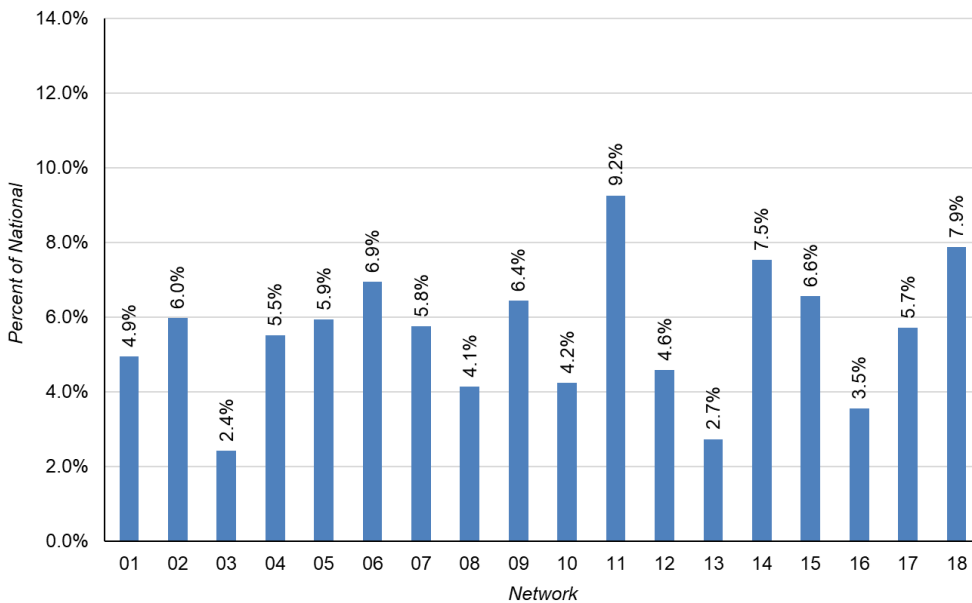
Source of data: CROWNWeb

Percent of National Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network 2019

National total home hemodialysis and peritoneal dialysis patients: 71,408
Source of data: CROWNWeb May 2020

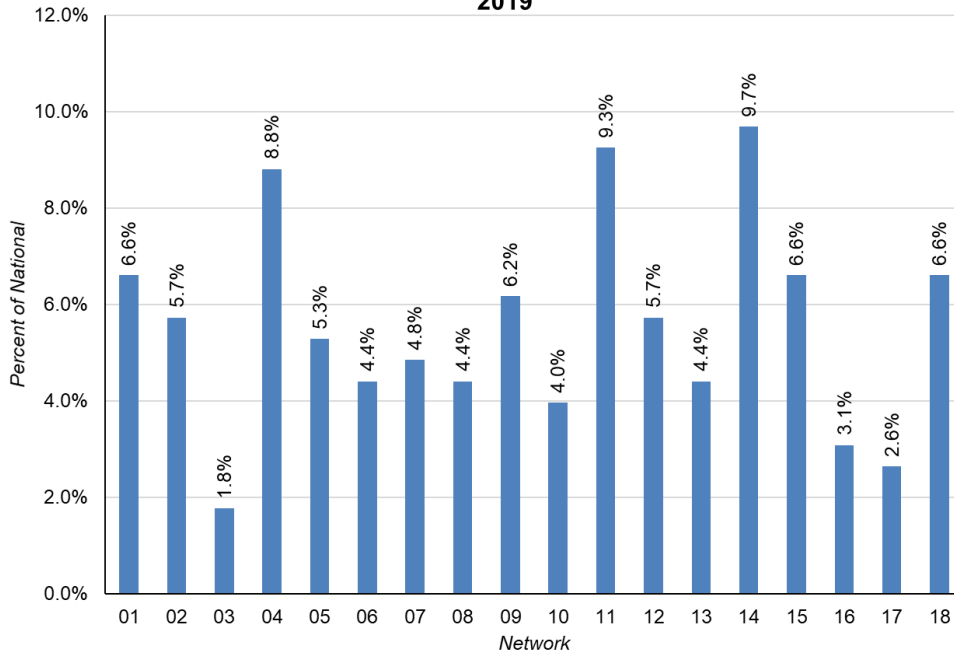Source of data: CROWNWeb

Percent of National Transplant Patients by ESRD Network 2019

National total transplant patients: 233,650
Source of data: CROWNWeb May 2020

Source of data: CROWNWeb

Percent of Medicare-Certified Kidney Transplant Facilities by ESRD Network
2019

National total ESRD Medicare-certified kidney transplant facilities: 227
Source of data: CROWNWeb May 2020

Source of data: CROWNWeb

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ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

Grievances

IPRO ESRD Network of New England responds to grievances filed by or on behalf of ESRD patients in Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island and Vermont.

According to CMS a grievance is defined as follows:

"A 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's expectations with respect to safety, civility, patient rights, and/or clinical standards of care." Case review activities fall into three categories: 1) Facility Concerns, 2) Grievances, which has three subcategories, and 3) Access to Care, which has two sub-categories.

A facility concern is initiated by a contact from a facility staff member who wishes to discuss either a specific or general circumstance(s) about a patient or the facility, for which there is insufficient information to meet the criteria for a grievance or access to care case. An "immediate advocacy" is a case of a simple, generally non-quality of care nature that can be completed in seven calendar days or less. A general grievance is a case of a more complex nature than an immediate advocacy, that does not involve clinical quality of care issues and that cannot be resolved within seven calendar days. A clinical quality of care (QoC) grievance involves situations in which the grievant alleges that an ESRD service received from a Medicare-certified provider did not meet professionally recognized standards of clinical care.

In 2019 the Network addressed 32 patient grievance cases that were reported (eleven (11) Immediate Advocacy cases, three (3) Quality of Care cases and four (4) Grievance cases).

The 11 Immediate Advocacy cases involved environmental, operational, or interpersonal issues that were resolved to the patients' satisfaction within seven days. For each case the Network's Patient Services Director (PSD) reviewed the facility's progress notes regarding the incident; outlined and provided to the facility the CMS Conditions for Coverage and advocated on behalf of the patients and their rights. The Network shared and encouraged facilities to distribute patient education resources; in addition, Network staff provided facility staff with educational resources aimed at fostering improved communications between staff and patients. The Network responded to three (3) Quality of Care grievances filed by or on behalf of patients in 2019. To determine appropriate interventions, the Network carefully examined the patient's concerns and conducted a thorough review of the relevant medical records and facility policies and procedures pertaining to the grievances raised.

Four (4) Grievances cases were reported to the Network in 2019. With each of these cases, the Network advocated for the patient, promoting the patient's right to participate in his or her healthcare and to have a voice in the services provided by the facility. The Network advocated for the patients to receive supportive services from their assigned social worker at the facility and to freely discuss any areas of concern. In addition, the PSD provided guidance to help facility staff to employ a patient-centered approach to best provide assistance and support to patients.

Access to Care and Involuntary Discharge (IVD) Cases

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.

There are three types of Access to Care cases: involuntary transfers, involuntary discharges, and failures to place. Involuntary transfer occurs when a facility closes, either temporarily or permanently, requiring the patient to be transferred to another facility. Involuntary transfers may also occur when a patient is transferred to another facility due to having created safety concerns by exhibiting threatening or abusive behavior. An involuntary discharge is initiated by the treating dialysis facility without the patient's agreement. Failure to place occurs when all local outpatient dialysis facilities have denied the patient acceptance for routine dialysis treatment.

Facilities reported 26 Non-Grievance Access to Care cases to the Network in 2019. The Network received fourteen (14) Involuntary Discharge (IVD) cases during 2019, six (6) of which were immediate IVD situations. Five (5) patients were transferred during the 30-day notice.   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 patients even after discharge, by aiding in the referral to new facilities and by assisting to identify new placement for the patients. All cases were based on actual physical harm or severe threat of physical harm. The Network responded to facility requests to discuss the disruptive behavior of patients and provided interventions to assist facilities with de-escalation techniques. The Network also provided facilities educational resources about grievances and patient rights.

The Network guided facilities in reviewing practices they currently follow to support patients and, when appropriate, recommended new approaches. Network recommendations focused on involving patients and their families in their care from the moment of admission. The Network advised facilities to pay particular attention to patients who 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.

An analysis of the cases referred from December 2018 to November 2019 indicated that, of the total of 99 cases reviewed/assessed by the Network (Grievance and Access to Care), 42 occurred in the following region: seventeen (17) in Connecticut, sixteen (16) in Massachusetts, one (1) in Maine, three (3) in Rhode Island and three (3) in New Hampshire.

Network Assistance and Quality Improvement

For each of the cases described above, the Network advocated for patients, promoting the rights of patients to participate in their health care and to have a voice about 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 support their patients' care. In many cases the Network discussed with facility staff:
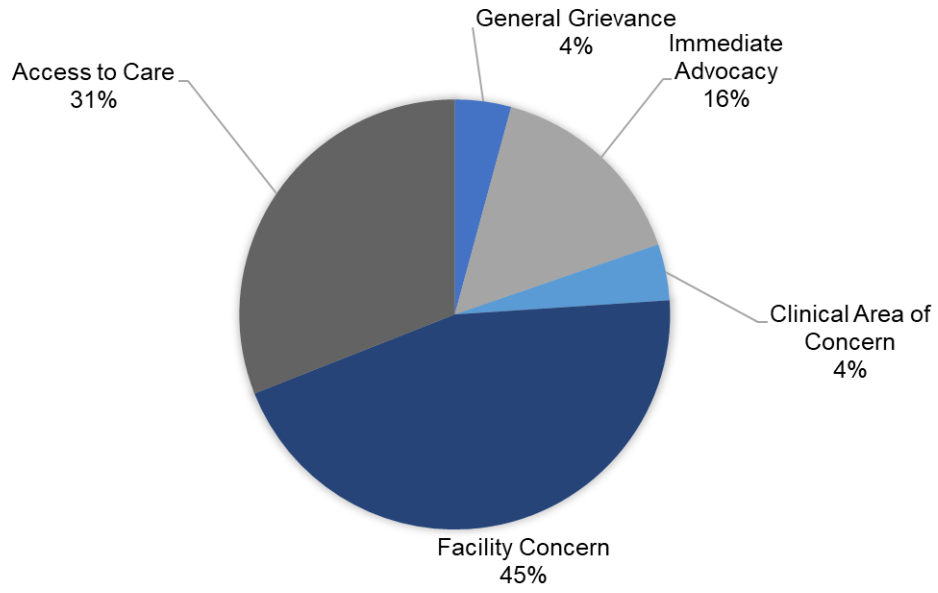
- The importance of establishing professional boundaries with patients;
- The value of patient centered care, reminding staff that what matters to the patient is important to understand how to best assist in his or her care;

- The importance of identifying patients' barriers that might limit their ability to comply with prescribed treatment plans (e.g. unaddressed mental health issues, lack of housing, immigration status, lack of health insurance). This assists staff in establishing goals that will be meaningful and helpful for each patient.

In addition, the Network provided facilities with the following resources:

- The *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 create awareness of the resources available, with a focus on improving communication early in the grievance process;
- A poster and flyers that outline clearly defined parameters of the support that the Network could provide, as well a clear understanding of the types of support that the Network could not provide.

Network 01: Percent of 2019 Grievances and Non-Grievances by Case Type

- General Grievance 4%
- Immediate Advocacy 16%
- Clinical Area of Concern 4%
- Facility Concern 45%
- 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

In 2019, the Network worked with the 50% of the facilities in its service area with the highest rates of bloodstream infections, with a goal to reduce long term catheter (LTC) usage by two percentage points in facilities that had a greater than 15% usage rate. Network staff worked with target facilities to identify knowledge gaps, increase accurate reporting of central venous catheters (CVC), and improve communication with vascular surgeons throughout the region.

Baseline for this project, determined by available CROWNWeb data in October 2018, was 19.02% with a goal of 17.0% by re-measure.

Through the use of the Centers for Disease Control and Prevention's (CDC) Core interventions, monthly touch points with the vascular access coordinators, and implementation of the patient level- tracking tool the Network was able to achieve 1.96% reduction rate within target facilities.

Interventions

Network strategies included:
- Grouping long-term catheter patients into four categories:
    - Patients with no options for internal vascular access placement,
    - Patients choosing to keep a CVC even after adequate education,
    - Patients being evaluated for internal vascular access,
    - Patients who have not taken steps to have CVC removed;
- Educating facilities on CROWNWeb definitions;
- CROWNWeb data checks;
- Provision of LTC report cards featuring benchmarking and ranking of the facility's performance as compared with other facilities in the Network's service area;
- Focused improvement efforts to target the group of patients who had chosen to keep their catheters and the patients who had not started the process;
- Supporting facilities in hosting lobby days during which patients promoted educational information about vascular access options to other patients. Peer mentors provided information about the benefits of an internal vascular access vs. a CVC; and
- Facilitation of meetings between nephrologists and vascular surgeons about ways to improve coordination for early access planning.

Barriers to achieving goals

- Patients are often discharged from a hospital with a LTC and no follow up appointment with a vascular surgeon;
- Patients do not understand of the importance of having their catheters removed as quickly as possible;
- Patients have difficulty making additional doctor appointments in a timely manner;

- Patients often face a delay time in getting appointments with interventional radiologists and surgeons; and
- There is often a lack of patient follow up after a referral is made to a vascular surgeon.

Best practices spread to achieve goals

Target facilities identified the following strategies as best practices:
- Facilities identify one person to serve in a primary role as the vascular access coordinator;
- Patients are scheduled to meet with a vascular surgeon before being discharged from the hospital;
- Facilities establish regular meetings with vascular access groups to discuss all patients with CVCs in the facility and any recurring issues identified with grafts or fistulas;
- Facilities follow up with the vascular surgeon group shortly after the patient's initial appointment; and
- Implementation of quarterly meetings with local vascular surgeon groups.

Network 01: Long-Term Catheter Rates
January 2019 - October 2019
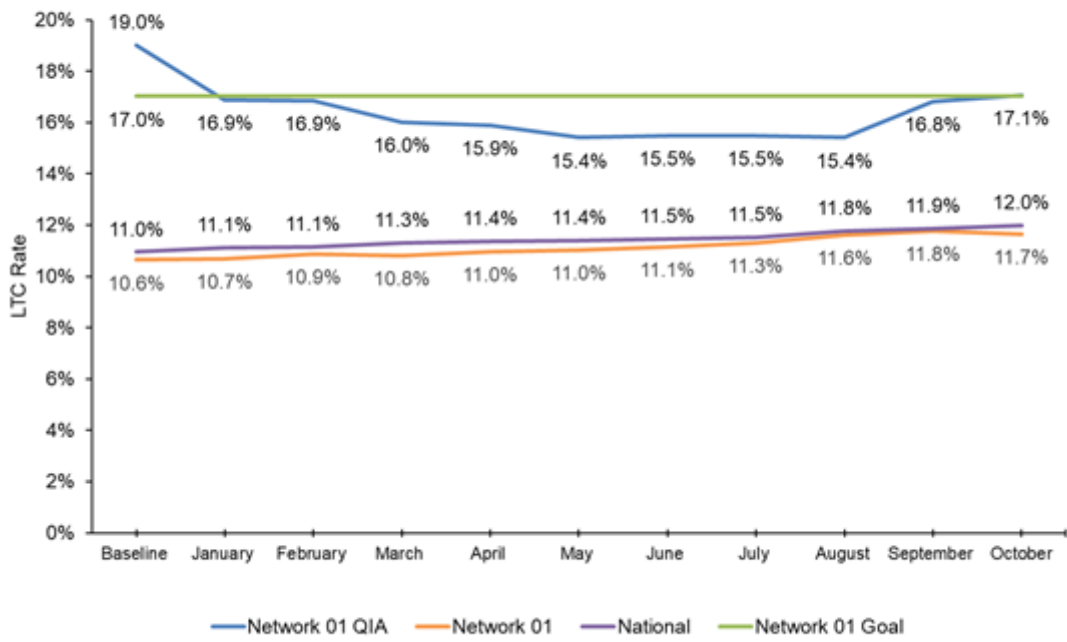
QIA: Quality Improvement Activity
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Bloodstream Infection Quality Improvement Activity

Project Overview

The Network supports the CMS national initiative to reduce the rate of bloodstream infection (BSI) by 50% over the next five years. To aid in achieving this goal Network staff 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, 2018). Within that group of facilities, the Network worked with a 20% cohort (42 facilities), with the highest number of excess infections. The outcome goal was to achieve a 20% reduction in the semi-annual pooled mean BSI rate from baseline.

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 2018, with the re-measure period being the semi-annual quarterly pooled mean BSI rate for January to June 2019. The baseline rate for the cohort was 1.05% with a 20% reduction goal of 0.84%. The Network was able to reach a 0.67% semi-annual quarterly pool mean rate, and achieved a 36% reduction in the BSI rate for the cohort.

Interventions

Network strategies included:
- Facility staff and patients working together to host facility lobby days focused on infection prevention;
- Patient Advisory Committee (PAC) members conducting hand hygiene audits of both staff and patients;
- 97.45% of the National Health and Safety Network (NHSN) users in the service area completed annual NHSN training to ensure accurate reporting;
- Monthly CDC audits completed and reported in NHSN;
- Root cause analysis for every identified BSI during the project period with findings discussed during Quality Assessment Performance Improvement (QAPI) meetings;
- Tracking and monitoring of patients to trend catheter removal;
- Assisting 29.59% of the BSI QIA facilities to enroll in a Health Information Exchange (HIE) or set-up an evidence-based highly effective information transfer system; and
- Assisting NHSH users to run and interpret reports to be discussed during QAPI.

Barriers to achieving goals

- Staff missing opportunities to discuss/demonstrate hand hygiene techniques with patients;
- Patients not performing hand hygiene when entering and exiting the unit;
- Staff feeling rushed during turn over;
- Lack of compliance with environmental disinfection practices;

- Lack of communication among staff at skilled nursing facilities and dialysis facilities regarding shared patients: and
- Improper antibiotic use.

Best practices spread to achieve goals

Target facilities identified the following strategies as best practices:
- Facilities appointing a primary infection control coordinator;
- Having a staff member on site with NHSN access;
- Completing NHSN audit tools; and
- Running monthly NHSN infection rate data and reviewing them in QAPI.

Network 01: Reduction in Bloodstream Infections (BSI) in QIA Facilities

Nationally, the Networks reduced 2,729 BSI in 2019

64

34

■ Goal Reduction   ■ Actual Reduction
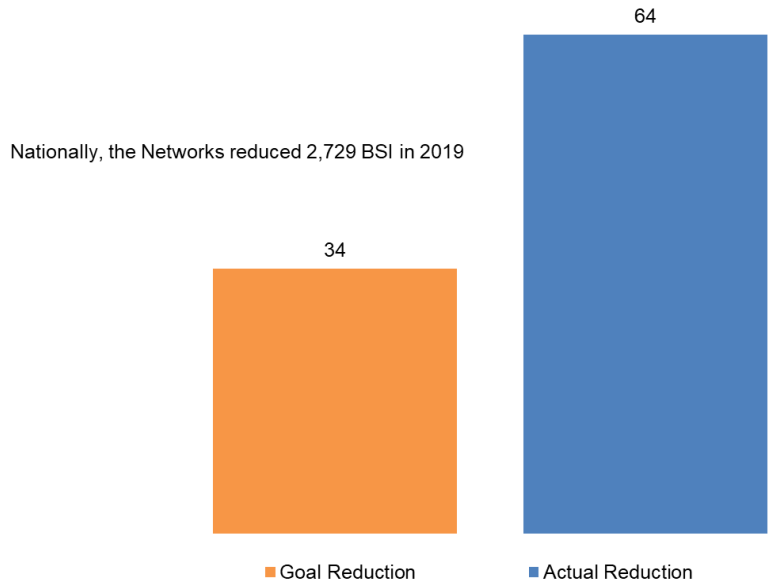
The Network goal was to decrease the rate of BSI by 20% or greater relative reduction in the pooled semi-annual mean in facilities participating in the QIA
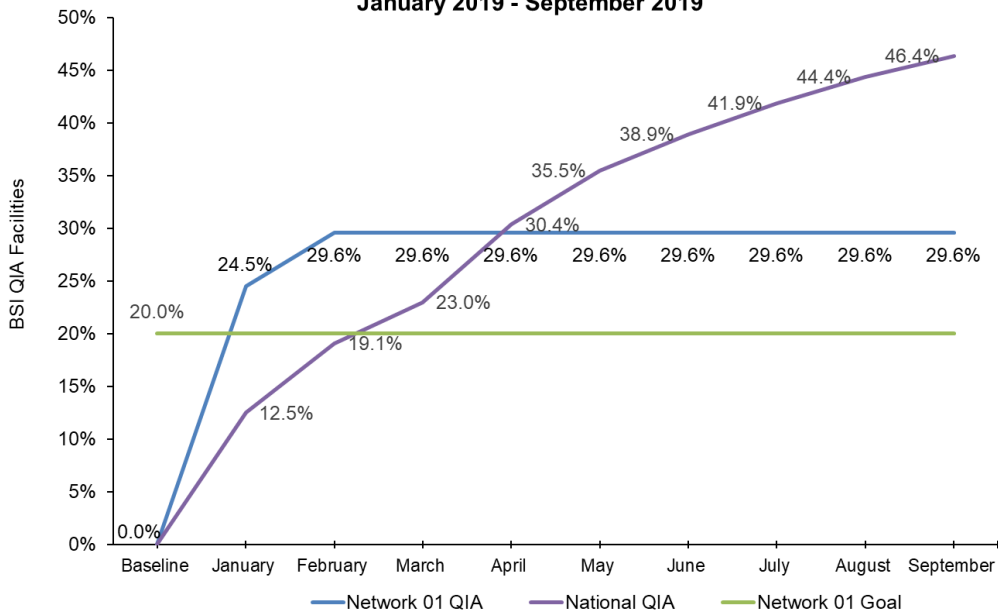
QIA: Quality Improvement Activity
Source of data: National Healthcare Safety Network (NHSN) January 2019 - June 2019 compared to January 2018 - June 2018

Network 01: Percent of Dialysis Facilities with At Least One Person Who Has Completed the NHSN Dialysis Event Surveillance Training
January 2019 - September 2019
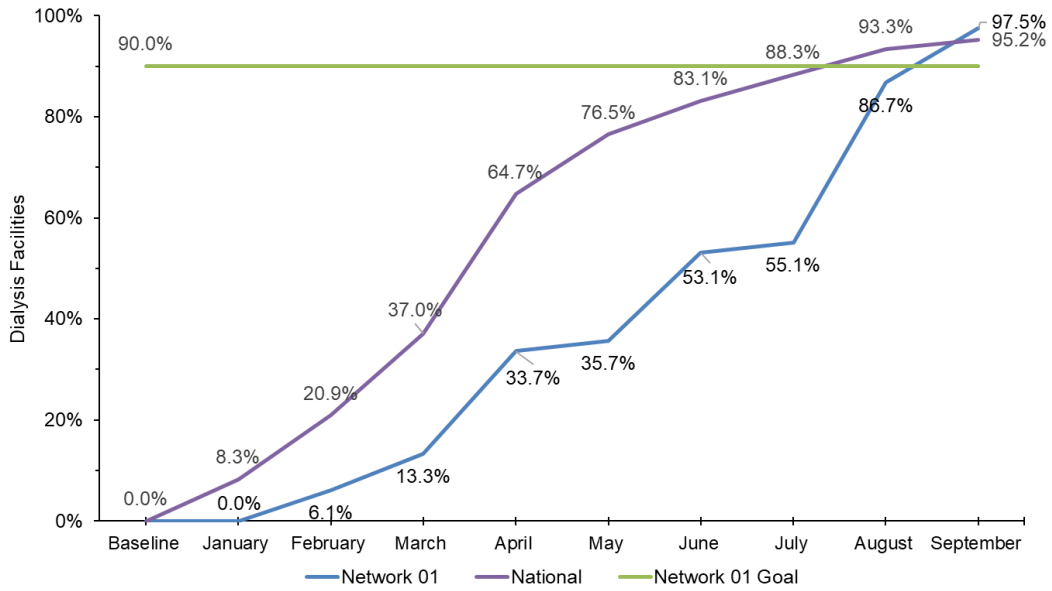
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Network 01: 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

Despite ongoing education about the benefits of transplantation and transplant referrals being a CMS Conditions of Coverage requirement for dialysis facilities, barriers to the referral to transplant of interested patients still exist.

In 2019, Network staff designed a multifaceted quality improvement activity to increase the number of dialysis patients added to the United Network of Organ Sharing (UNOS) waitlist. The Network's activities targeted groups with the lowest rates of referrals; tailored interventions to ensure that all interested and suitable patients are given the opportunity for transplant as a treatment option, and improved communication between dialysis facilities and transplant centers.

The Network worked with 30% (60) of the dialysis facilities in its service area, to demonstrate a two percentage point increase the natural trend of the number of dialysis patients added to the UNOS waitlist. The goal was to add 157 patients to the waiting list by September 20, 2019. Data were provided to the Network by UNOS via the ESRD NCC.

The Network employed a "Six Step" methodology to monitor patient progression through the transplant evaluation process: 1) Patient interest in transplant, 2) Referral call to transplant center, 3) First visit to transplant center, 4) Transplant center work-up, 5) Identified as successful transplant candidate, 6) On waiting list or evaluating potential living donor. These steps were designed to track patients through their journey from their initial interest in transplant to placement on the waitlist.

Although the Network did not achieve a full two percentage point increase, it did successfully assist facilities in getting 132 patients added to the UNOS kidney waitlist. The Network demonstrated the fourth highest QIA performance in the nation.

Interventions

Network strategies included:
- Working with facilities to identify interested transplant candidates;
- Supporting each facility in conducting root cause analysis to identify barriers that keep patients from completing the transplant evaluation process;
- Identifying a transplant coordinator in each facility;
- Providing facility staff education on the "Six Step" process, including information on how to track patients through the process;
- Addressing identified communication barriers between dialysis facilities and transplant centers;
- Identifying patient navigators to help guide transplant candidates through the evaluation process; and
- Supporting patients to host lobby days and creating education stations promoting the benefits of a kidney transplant.

Barriers to achieving goals

- Patients' lack of interest in kidney transplantation;
- Lack of communication between the dialysis facilities and the transplant centers;
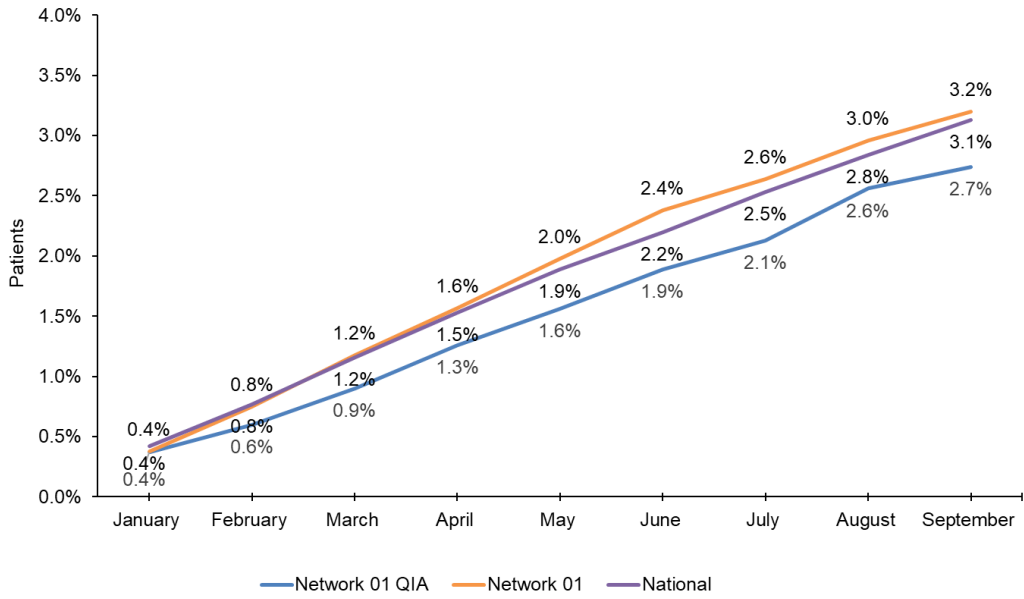
- The number of appointments required to complete the transplant evaluation process;
- Inadequate patient transportation to and from multiple medical appointments; and
- Patients and dialysis facilities losing track of where patients are in the work up process.

Best practices spread to achieve goals

Target facilities identified the following strategies as best practices:
- Identifying a dedicated transplant coordinator in each dialysis facility;
- Identifying and obtaining contact information for patient transplant coordinators;
- Fostering regular communications between the dialysis facility and the transplant center;
- Having the transplant center host a lobby day at the dialysis facility;
- Frequent and ongoing patient education; and
- Dialysis facilities must refer every patient interested in transplant to a transplant center for evaluation.

Network 01: Percent of Patients Added to the Transplant Waitlist
January 2019 - September 2019

Patients

	January	February	March	April	May	June	July	August	September
Network 01	0.4%	0.8%	1.2%	1.6%	2.0%	2.4%	2.6%	3.0%	3.2%
National	0.4%	0.8%	1.2%	1.5%	1.9%	2.2%	2.5%	2.8%	3.1%
Network 01 QIA	0.4%	0.6%	0.9%	1.3%	1.6%	1.9%	2.1%	2.6%	2.7%

— Network 01 QIA   — Network 01   — National

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

Home Therapy Quality Improvement Activity

Project Overview

The Network worked with 60 facilities (30% of the Network service area) to achieve a two percentage point increase in the natural trend of the numbers of patients utilizing home therapies by September 30, 2019. This translated to a goal of 390 patients in the Network's service area beginning a home dialysis modality. The primary data source for this quality improvement activity was CROWNWeb.

Network staff used a "7 Step" methodology to monitor patient progression from initial interest in modality change through the start of the new modality training: 1) Patient interest in home dialysis, 2) Educational session to determine the patient's preference of home modality, 3) Patient suitability for home modality determined by a nephrologist with expertise in home dialysis therapy, 4) Assessment for appropriate access placement, 4) Placement of appropriate access, 5) Patient accepted for home modality training, and 7) Patient begins home modality training. The seven steps were designed to help facilities identify barriers with progression of the modality change.

The Network was able to meet and exceed the goal by starting 396 patients on a home modality, increasing the QIA percentage rate to 7.49%.

Interventions

Network strategies included:
- Encouraging facilities to participate in the ESRD NCC Learning and Action Network (LAN) home modality events;
- Supporting facilities in appointing a home dialysis champion to help educate patients about the benefits of home dialysis;
- Encouraging facilities to host lobby days and create education stations promoting home dialysis;
- Providing information to facilities on the utilization of the "7 Steps" to track patients' progress toward utilizing a home modality; and
- Working with facility leadership to increase communication between the hemodialysis staff and home dialysis units.
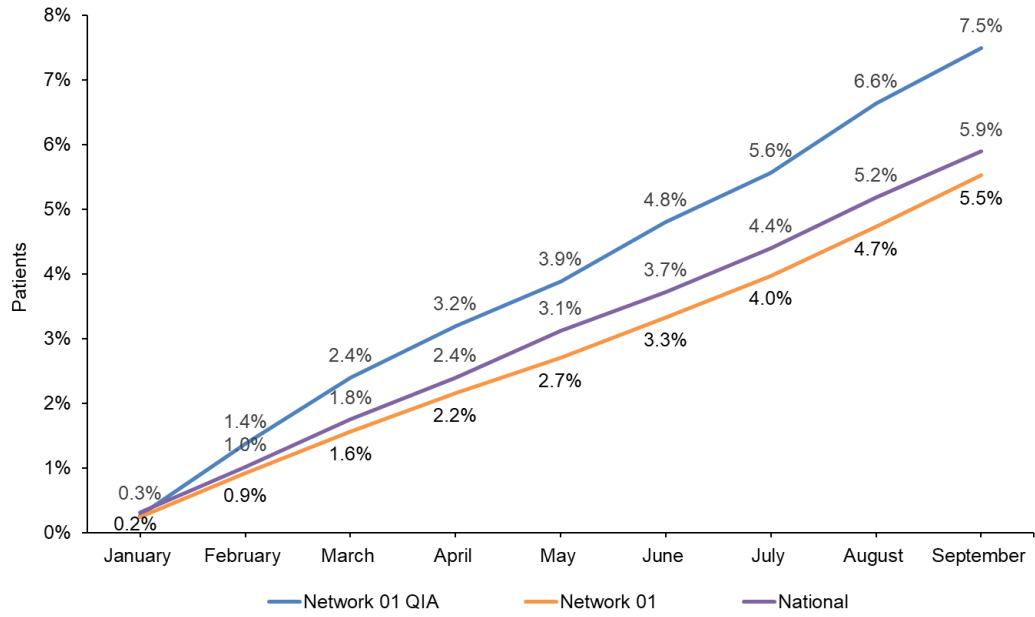
Barriers to achieving goals

- Patients choosing to stay in-center;
- Physicians' lack of comfort with managing home dialysis patients;
- Facilities closing, resulting in consolidation of home programs; and
- Shortage of home dialysis nurses.

Best practices spread to achieve goals

- Early education for patients, even before starting dialysis;
- Peer-to-peer education on the benefits of home dialysis;
- Frequent staff education;
- Promotion of home dialysis by in- center staff; and
- Including a care partner in home dialysis education and the decision process.

Network 01: Percent of Patients Starting Home Dialysis
January 2019 - September 2019

Network 01 QIA values: January 0.3%, February 1.4%, March 2.4%, April 3.2%, May 3.9%, June 4.8%, July 5.6%, August 6.6%, September 7.5%

National values: February 1.0%, March 1.8%, April 2.4%, May 3.1%, June 3.7%, July 4.4%, August 5.2%, September 5.9%

Network 01 values: January 0.2%, February 0.9%, March 1.6%, April 2.2%, May 2.7%, June 3.3%, July 4.0%, August 4.7%, September 5.5%

Legend: Network 01 QIA — Network 01 — National

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

Population Health Focus Pilot Project Quality Improvement Activity

Project Overview

Network 1 selected the project: *Support Gainful Employment of ESRD Patients* for its 2019 Population Health Focused Pilot (PHFPQ) QIA. The Network worked with participating facilities to engage and educate patients on the benefits of working with a vocational rehabilitation/employment network agency (VR/EN). The goal of the project was to improve referrals by 10% and overall usage by 5% and to reduce the identified disparity in the targeted facilities by one percent from the baseline rate (September 2018). The re-measure outcome referral rate was 64.97% and surpassed the goal by 54.97 percentage points.

The QIA targeted prevalent patients, ages 18-55, who were receiving dialysis at 21 selected facilities in the Network's service area. Data on the progress of the project were supplied to the Network by the ESRD NCC on a monthly basis.

Facilities were selected based on the following criteria: 1) Facilities with a working population less than 27% of its total census, 2) Facilities with a census of 20 or more patients between the ages of 18 to 55, and 3) Facilities with low percentages of patients currently receiving vocational rehabilitation services.

Interventions

The Network educated project leads on how to use the *Vocational Rehabilitation Tracking Tool* that provides facilities with patient level data to help track the number of eligible patients that have been referred to VR and the number of patients utilizing services. Tracking tools were submitted to the Network on a monthly basis to ensure that patient data were captured in CROWNWeb.

The Network staff conducted a root cause analysis (RCA) in each of the targeted facilities as the first step in identifying where barriers to the referral of patients and their usage of VR/EN existed. Following the RCA, the Network used a plan-do–study act (PDSA) model to test the success of strategies that were implemented to overcome those barriers.
- Plan: To work with stakeholders and SMEs to adjust interventions based on barriers identified in the RCA;
- Do: Host a conference call with SMEs to discuss possible interventions aimed at increasing patient interest in vocational rehabilitation; host a conference call with facilities to discuss barriers;
- Study: Explore how proposed interventions had been executed by other facilities and examine challenges and successes; and
- Act: To develop new patient-facing resources for VR and collaborate with external agencies that VR agencies use.

Based on the results of root cause analysis, the Network launched a vocational rehabilitation campaign with a goal to encourage dialogue about vocational rehabilitation in targeted facilities. The campaign featured distribution of

- Educational materials about EN/VR;

- Network-developed resources addressing the identified disparity in the vocational rehabilitation setting as a way to encourage this segment of the patient population to take advantage of the available services and to help facility staff to promote these services to all segments of the patient population.
- Additional campaign resources including a list of ENs local to the facility, information about the state adult career and continuing education services and the Social Security Administration's Ticket to Work program (TTW).

The Network collaborated with selected EN/VR agencies to assist more patients in using these services and to encourage their support of the unique challenges faced by the ESRD patient population; this included education of EN/VR staff about the importance of time accommodations due to the three day a week dialysis schedule.

## Barriers to achieving goals

During the implementation of this project, the Network identified a community-wide lack of knowledge about TTW program. The Network provided education to the community about the various services offered by the TTW program. The Network conducted a RCA with participating facilities, which identified the following barriers to documentation of patients' interest in seeking vocational rehabilitation:

- Fear of loss of benefits;
- VR interest/status not always communicated to CROWNWeb entry staff for record management;
- Lack of communication with eligible patients about VR opportunities;
- Lack of patient interest'; and
- Lack of resources for patients in urban areas.

Best practices spread to achieve goals

- Ongoing assessment and evaluation of identified barriers;
- Provision of increased education to patients regarding the VR program and other services that could improve them of quality of life;
- Staff training about appropriate EN/VR resources;
- Inclusion of a conversation regarding VR during care plan meetings;
- Educating and training dialysis staff about the need for a process for documentation of VR referrals in CROWNWeb; and
- Routine follow-up with patients to monitor employment and/or vocational rehabilitation interest/involvement and offering support to patients throughout the process.

Network 01: Percent of Eligible Patients Referred to an Employment Network or a Vocational Rehabilitation Agency
February 2019 - September 2019
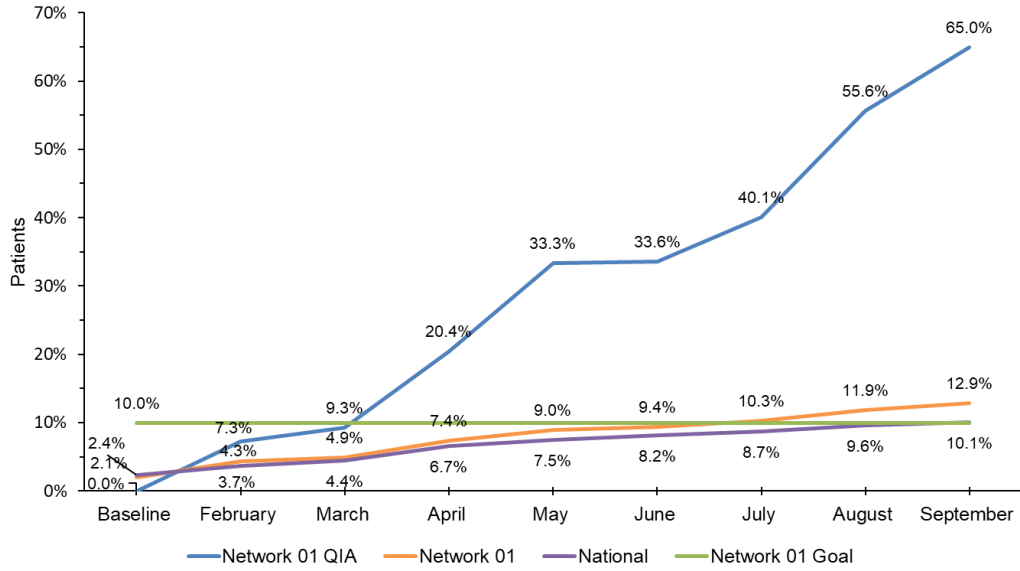
QIA: Quality Improvement Activity
Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Network 01: Percent of Referred Patients Receiving Services from an Employment Network or Vocational Rehabilitation Agency
February 2019 - September 2019
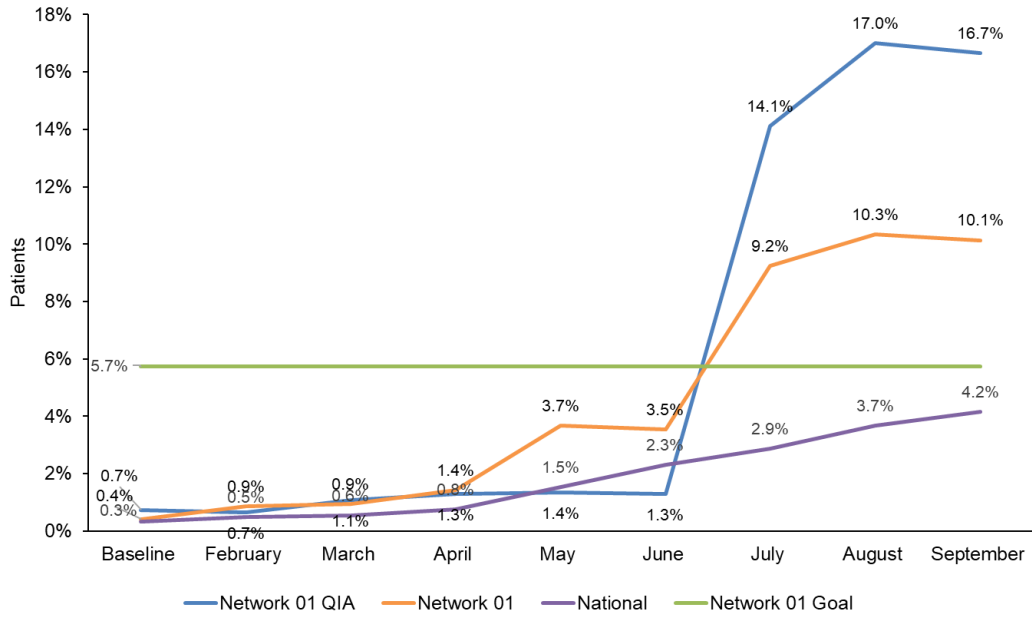
QIA: Quality Improvement Activity

Source of data: ESRD NCC 2019 Dashboard accessed October 2019

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.

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 state health departments, offices of emergency management, and large dialysis organization emergency management teams to ensure safety and continuity of care for ESRD patients in New England.

For all emergencies reported in 2019, Network staff offered comprehensive support to ESRD patients and linked dialysis providers with appropriate emergency response resources, including the Kidney Community Emergency Response (KCER) program, state offices of emergency management, and other stakeholders. The Network worked with facility staff to ensure that all information about "closed" or "altered" status was available to the Network for assisting with access to care coordination, as needed.

The Network successfully assessed, responded to, and tracked 12 emergency events in 2019. In dealing with emergency events, the Network staff members were trained to:

- Evaluate the affected area to assess impact;
- Release email or fax blasts notifying dialysis facilities and response agencies in the affected area of the occurrence;
- Provide dialysis facilities, patients, and family members, and/or care partners with information on appropriate local resources;
- Connect facilities and individual patients, families, and/or care partners with appropriate local resources;
- Participate in emergency meetings with local offices of emergency management and state health departments; and
- Measure and quantify the impact of the occurrence.

Events

January: A dialysis unit had a flood due to pipe breaking in the water room. Dialysis treatments were suspended for about two hours. The facility's emergency water plan was activated and running on deionization (DI) water. Vendor was requested to repair the reverse osmosis (RO) system and run a dis-infection process. No patients were affected.

February and March: A winter weather advisory due to a snow event was sent to a community. All patients were treated, with a few facilities reporting altered treatment schedules.

July: A heat wave advisory communication was sent to all dialysis facilities and patient SMEs, warning of extreme weather conditions for a prolonged period. The alert contained local weather briefings and resources to prevent heat-related illness.

July: A Regional Operations Director from DaVita notified the Network about a temporary clinic closure in a Connecticut facility due to HVAC problems from the elevated heat. The facility temporarily transferred its patients to area DaVita facilities for Monday treatment. Facility staff communicated with all patients in the facility regarding access to care. Normal business operations resumed on the following

business day. Because this incident was isolated and quickly resolved, an Emergency Situational Status Report (ESSR) was not submitted to The Kidney Community Emergency Response (KCER)

October: The Network conducted an internal emergency planning meeting to review the National KCER Exercise
- During the call a true emergency occurred: the power went out in the Network's office, causing the phones and computers to go down;
- The Network followed emergency preparedness procedures detailed in the emergency plan;
- The back-up Network was deployed to take calls until the power was restored.

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.