ESRD NETWORK 2019 ANNUAL REPORT

Health Services Advisory Group: End Stage Renal Disease (ESRD) Network 17

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ESRD DEMOGRAPIC DATA

ESRD Network 17

As part of the Health Services Advisory Group (HSAG) team, Network 17 works with patients, dialysis facilities and transplant centers in the northern portion of California, Hawaii, Saipan (U.S. Commonwealth of the Northern Marianas Islands), and the U.S. Territories of Guam and American Samoa to improve the quality of care and quality of life for ESRD patients. HSAG has held the Network 17 contract since 2015.

Geography and General Population

Network 17 spans approximately 10,000 square miles, which includes crossing the International Date Line to reach Guam and Saipan, and passing south of the equator to American Samoa. Network 17's region includes:

- Northern California:
    - Covers the 45 most northern counties in California, starting in Fresno County and ending at the Oregon border.
    - Constitutes about one-third of the state's population and about 60% of the land area.

- Hawaiian Islands:
    - Include 137 islands, the largest of which is Hawaii, followed by Maui and Oahu.
    - Have a very diverse population comprised of persons identifying themselves as Native Hawaiian, Asian, Caucasian, and Pacific Islanders.

- American Samoa:
    - Has been a territory of the U. S. since 1900.
    - Has approximately 95% its population living on the largest island, Tutuila.

- Guam:
    - Is located in the Western Pacific Ocean.
    - Is part of the Mariana Islands.
    - Crosses the International Dateline and is approximately 19 hours by air from San Francisco.

- Saipan:
    - Crosses the International Dateline and is approximately 19 hours by air from San Francisco.
    - Has a population that includes Chamorro and other Micronesians.

ESRD Population

As of December 31, 2019, there were 30,266 dialysis patients and 13,345 transplant patients, for a total of 43,611 patients with ESRD in the Network 17 service area (see Chart A). The number of incident patients increased by 101, for a total of 6,871 individuals newly diagnosed with ESRD in 2019. (See Chart B) As of December 31, 2019, Network 17 comprised 5.7% of the total national prevalent dialysis patient population and 5.2% of the national incident patient population (see Charts C and D).

Chart A: Network 17: Count of Prevalent ESRD Patients by Treatment/Setting 2019

Network 17: Count of Prevalent ESRD Patients by Treatment/Setting 2019

Count Patients (y-axis): 0 to 50,000

- In-Center Dialysis: 25,919
- Home Dialysis: 4,347
- Total Dialysis Patients: 30,266
- Transplant: 13,345
- Total ESRD Patients: 43,611

Treatment/Setting (x-axis)

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

Chart B: Network 17: Count of Incident ESRD Patients by Initial Treatment/Setting 2019

Network 17: Count of Incident ESRD Patients by Initial Treatment/Setting 2019

Count Patients (y-axis): 0 to 8,000

- In-Center Dialysis: 5,658
- Home Dialysis: 1,083
- Kidney Transplant: 130
- Total Incident Patients: 6,871

Initial Treatment/Setting (x-axis)

Total Incident Patients = In-Center + Home + Kidney Transplant
Source of data: CROWNWeb May 2020
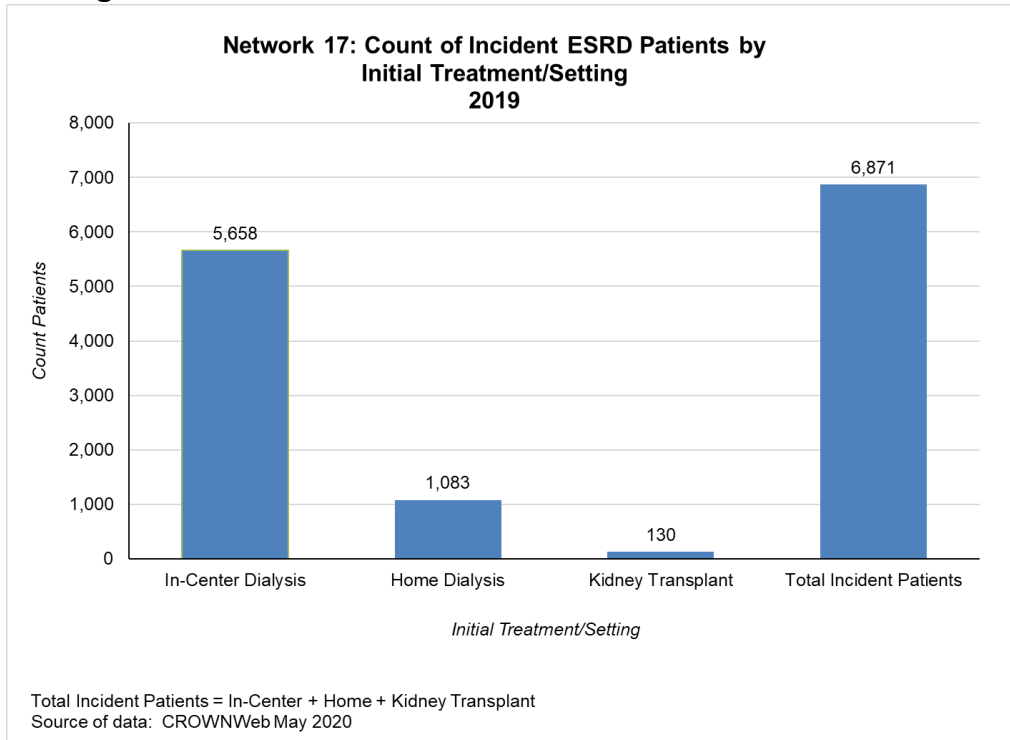
Chart C: Percent of National Prevalent Dialysis Patients by ESRD Network 2019

Percent of National Prevalent Dialysis Patients by ESRD Network 2019

Bar chart. Y-axis: *Percent of National*, from 0.0% to 12.0%. X-axis: *Network*, 01 through 18.

Network	Percent
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
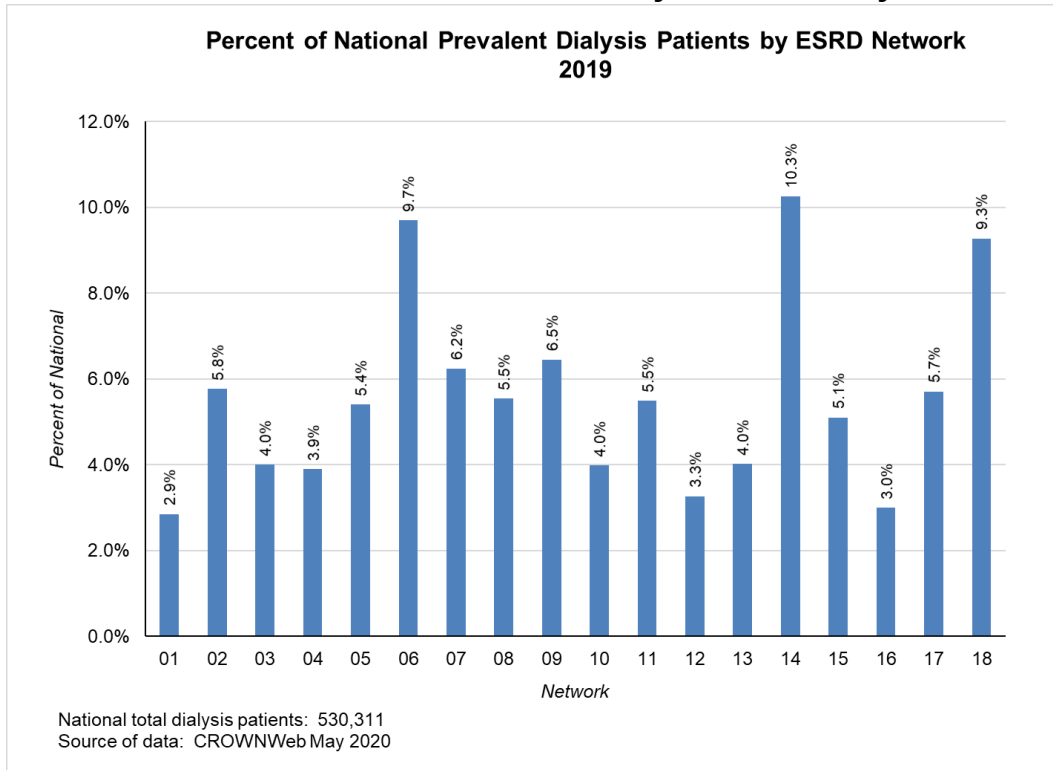
Chart D: Percent of National Incident Dialysis Patients by ESRD Network 2019

Percent of National Incident Dialysis Patients by ESRD Network 2019

Bar chart. Y-axis: *Percent of National*, from 0.0% to 12.0%. X-axis: *Network*, 01 through 18.

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
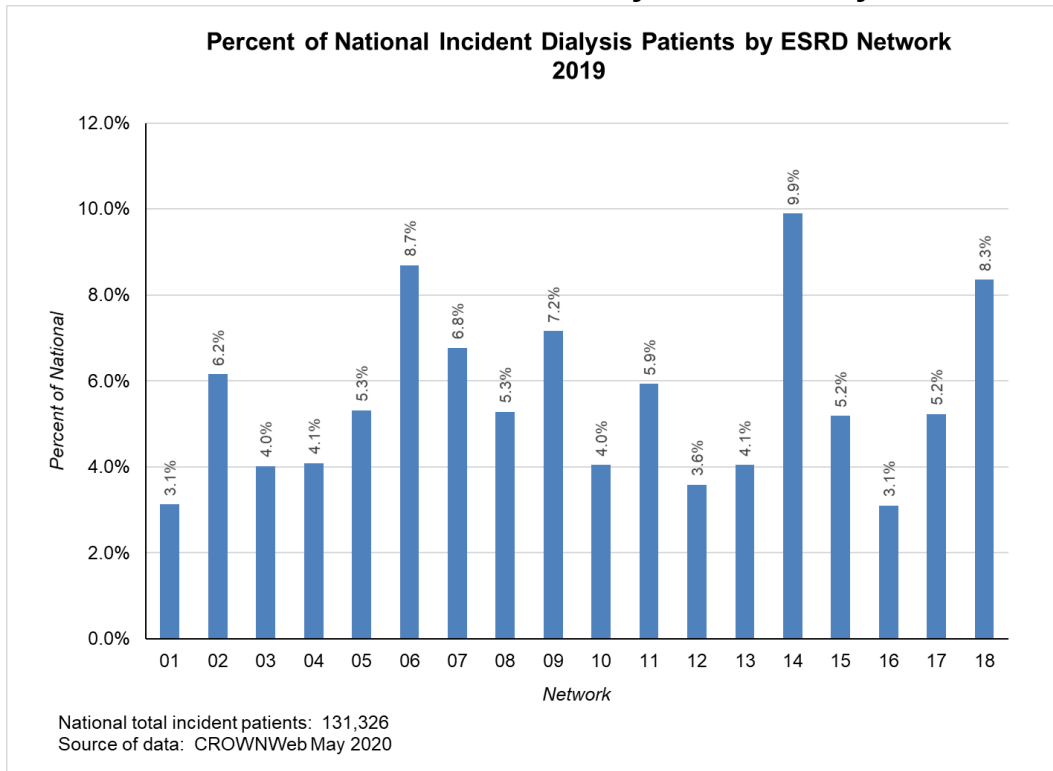
Race and Ethnicity [1]

As of December 31, 2019, 51.3% of prevalent dialysis patients in the Network 17 service area were characterized as White and 23.3% as Asian. The third largest race reported by patients was African American (12.1%), followed by Native Hawaiian or Other Pacific Islander (11.9%). Ethnically, most prevalent patients in the Network 17 service area (74.9%) were characterized as Not Hispanic or Not Latino as of December 31, 2019.

Gender and Age

Fifty-eight percent of prevalent ESRD patients in the Network 17 service area were male, 42.0% were female, and 66.0% were between the age of 45 and 74 as of December 31, 2019.

Dialysis Treatment Options

As of December 31, 2019, 85.6% of dialysis patients in Network 17 were receiving in-center hemodialysis (ICHD) treatments and 14.3% were using a home dialysis modality, including continuous-cycling peritoneal dialysis (CCPD), continuous-ambulatory peritoneal dialysis (CAPD), or home hemodialysis (HHD) (see Chart A). Nationally, the Network comprised 6.1% of all CCPD, CAPD, and HHD patients (see Chart E).

Chart E: Percent of National HHD and PD Patients by ESRD Network 2019

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

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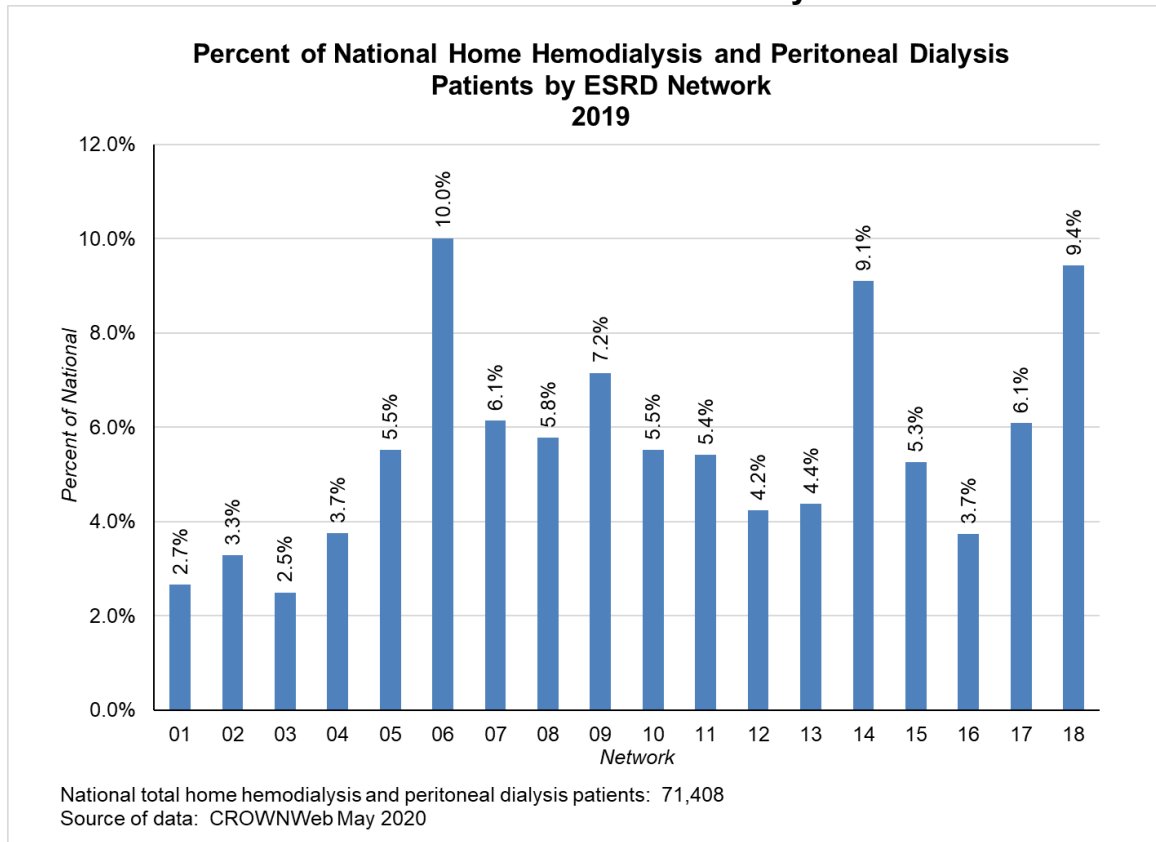
[1] Data on "ethnicity" and "race" should be interpreted with caution because of the inherent instability of race/ethnicity data.

Transplant

During 2019, 1,058 kidney transplants were completed by the six transplant centers in the Network 17 service area. As of December 31, 2019, there were 13,345 transplant patients in Network 17 which accounts for 5.7% of the 233,650 transplant patients nationally (see Chart E).

Chart E: Percent of National Transplant Patients by ESRD Network 2019

Percent of National Transplant Patients by ESRD Network 2019

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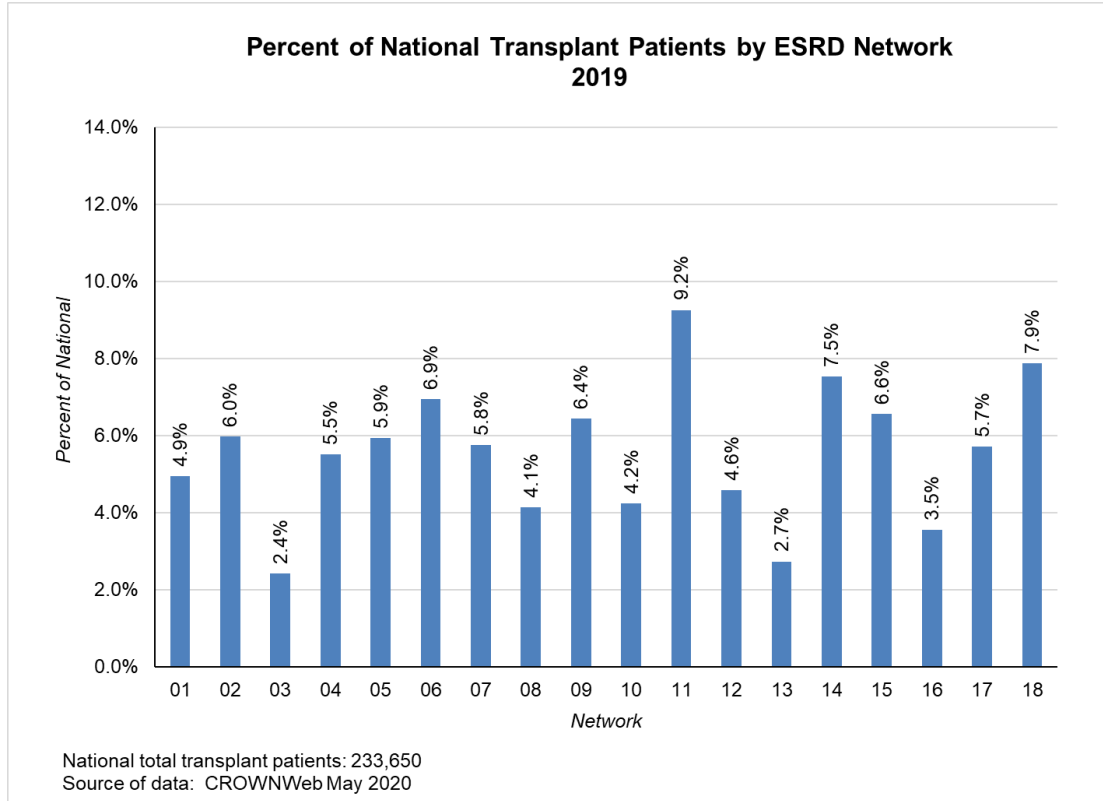
ESRD Facilities

As of December 2019, Network 17's service area included a total of 328 ESRD facilities, including 322 dialysis facilities and six transplant facilities (see Chart F). Nationally, Network 17 comprised 4.2% of all dialysis facilities (see Chart G) and 2.6% of all transplant facilities (see Chart H).

Chart F: Network 17: Count of Medicare-Certified Facilities by Treatment/ Setting 2019

Network 17: Count of Medicare-Certified Facilities
by Treatment/Setting
2019

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

Chart G: Percent of Medicare-Certified Dialysis Facilities by ESRD Network 2019

Percent of Medicare-Certified Dialysis Facilities by ESRD Network
2019

National total ESRD Medicare-certified dialysis facilities: 7,752
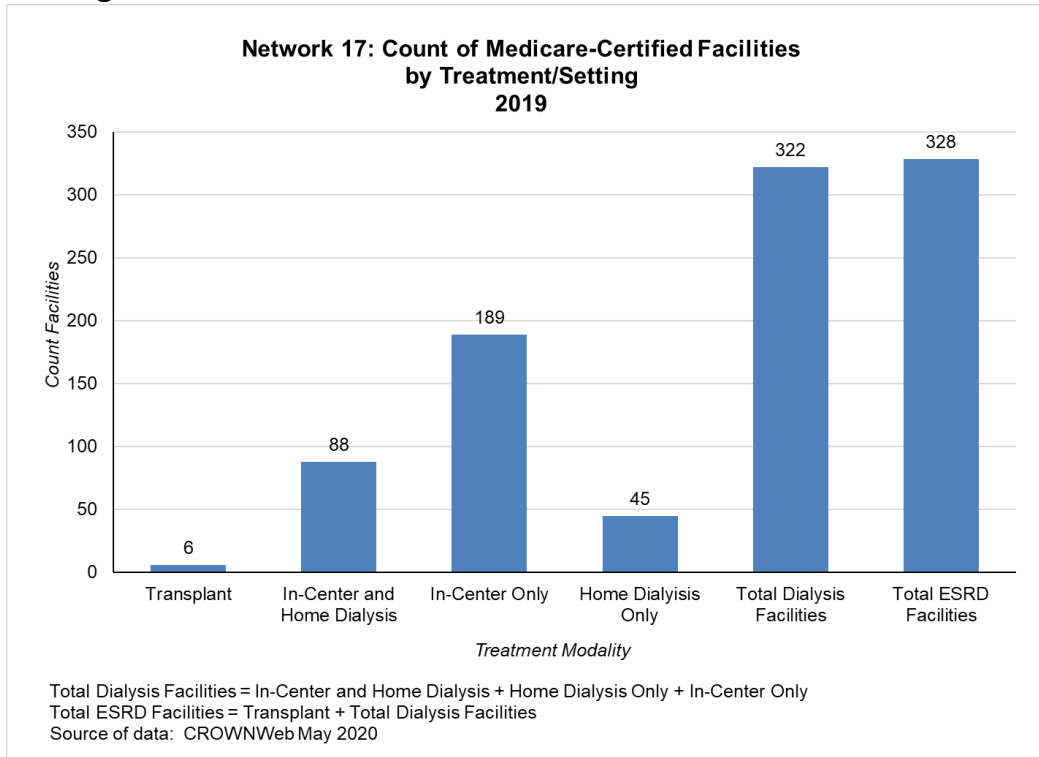Source of data: CROWNWeb May 2020
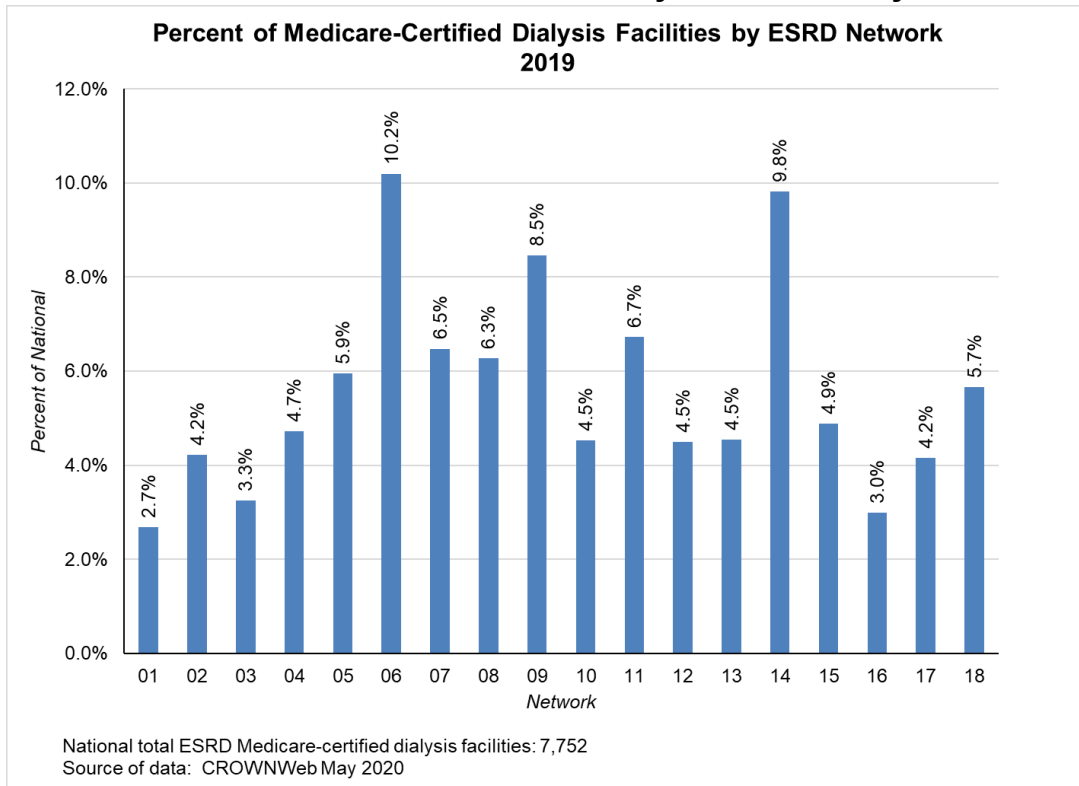
Chart H: Percent of Medicare-Certified Kidney Transplant Facilities by ESRD Network 2019

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

Values by Network:
- 01: 6.6%
- 02: 5.7%
- 03: 1.8%
- 04: 8.8%
- 05: 5.3%
- 06: 4.4%
- 07: 4.8%
- 08: 4.4%
- 09: 6.2%
- 10: 4.0%
- 11: 9.3%
- 12: 5.7%
- 13: 4.4%
- 14: 9.7%
- 15: 6.6%
- 16: 3.1%
- 17: 2.6%
- 18: 6.6%

Y-axis: *Percent of National* (0.0% to 12.0%)
X-axis: *Network*

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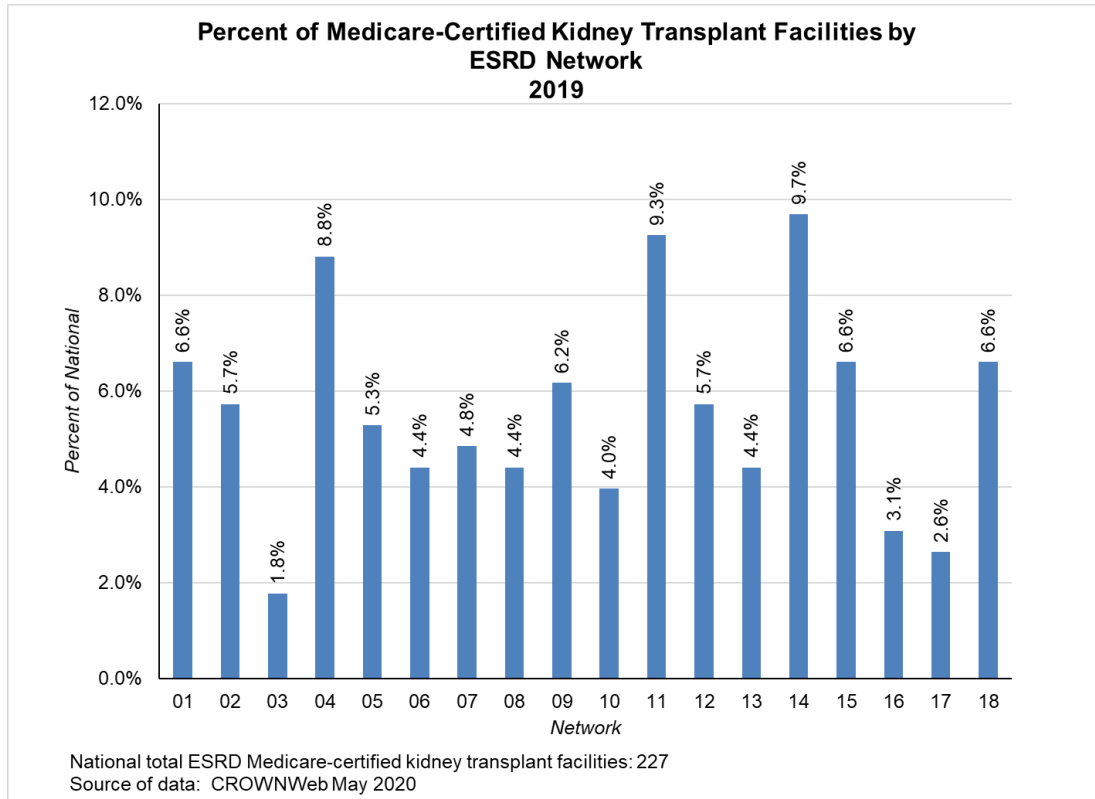
Dialysis Facility Affiliation

Sixty-six percent of the 322 dialysis facilities in the Network 17 service area were owned and/or operated by the three large dialysis organizations (LDOs): DaVita Kidney Care (DVA), Fresenius Medical Care (FMC), and Dialysis Clinic Incorporated (DCI) at the end of 2019; 43.4% were affiliated with DVA, 19.5% with FMC, and 2.7% with DCI. Another 19.0% were operated by Satellite Healthcare and 7.1% were operated by US Renal Care.

ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

Grievances

The Network responds to grievances filed by or on behalf of ESRD patients in its service area. Grievances may focus on staff issues, quality-of-care issues, or environmental issues. Grievances are addressed through immediate advocacy, where the Network contacts the facility to resolve the issue within seven business days. Alternately, the patient's concerns may be addressed through a general grievance or a clinical area of concern, which can take 60 days to resolve. All grievants receive a final outcome letter. According to Chart I below, during 2019, 9.0% of contacts to the Network were for grievances, including 7.0% for immediate advocacy, 1.0% for clinical areas of concern, and 1.0% for general grievance.
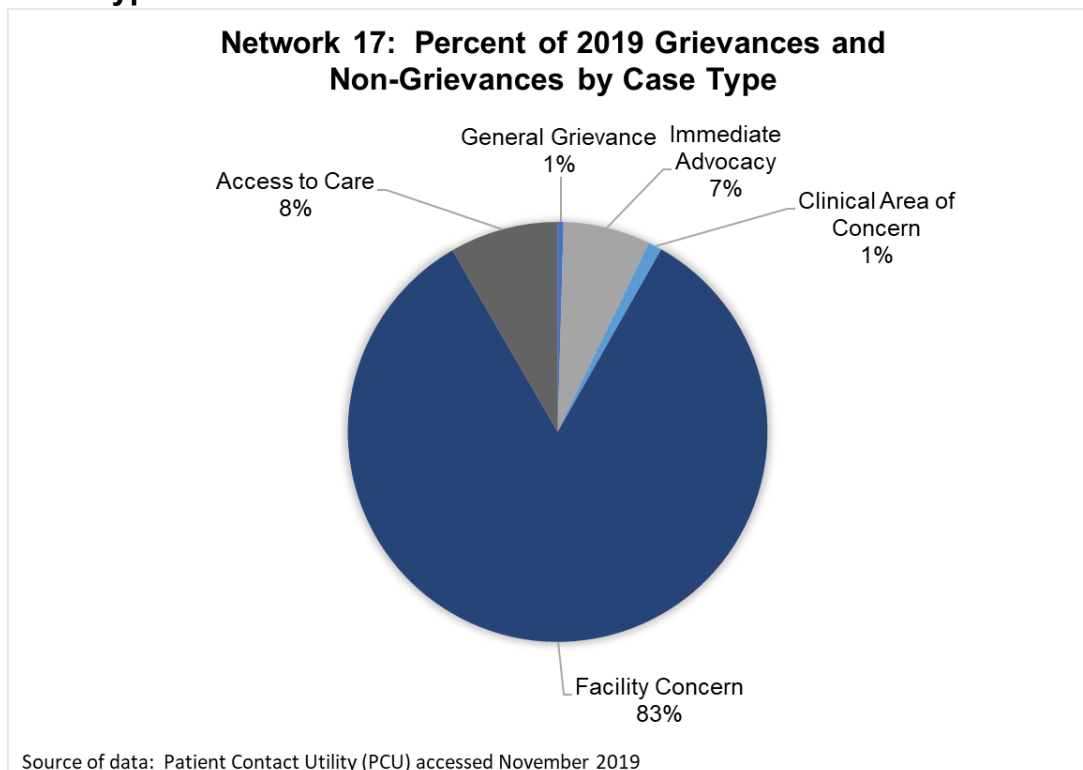
Facility Concerns

In addition to grievances, the Network also responded to facility concerns, which were 83.0% of all contacts to the Network in 2019. Facility concerns include contacts received from ESRD providers and facilities related to managing difficult patient situations, requests for technical assistance, and other concerns.

Access-to-Care Issues

The Network works with facilities and advocates for patients to avert potential access-to-care issues whenever possible. Access-to-care concerns include patients at-risk for involuntary discharge (IVD) or involuntary transfer (IVT), and patients who have not been able to permanently establish themselves with an outpatient dialysis facility. During 2019, access-to-care issues accounted for 8.0% of contacts to the Network. (See Chart I)

Chart I: Network 17: 2019 Percent of 2019 Grievances and Non-Grievances by Case Type

Network 17: Percent of 2019 Grievances and Non-Grievances by Case Type

General Grievance 1%
Immediate Advocacy 7%
Access to Care 8%
Clinical Area of Concern 1%
Facility Concern 83%

Source of data: Patient Contact Utility (PCU) accessed November 2019

ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA

Long-Term Catheter (LTC) QIA

During 2019, the Network conducted a QIA to reduce LTC (catheter in use for 90 days or longer) use in a cohort of 91 facilities with LTC rates greater than 15.0%. The Network implemented enhanced interventions for a subset of 14 facilities, with approximately 1,272 patients, that had the highest LTC rates in the cohort.

Goals and Outcomes

Using July 2018 CROWNWeb data for the baseline, the Network identified 14 facilities with LTC rates above 15.0% that had an aggregate baseline LTC rate of 18.7%. The goal was to achieve a two-percentage point reduction among the identified subset of facilities, or to reach 16.7%, by October 2019. The 14 facilities reduced their LTC rate to 13.7%, which exceeded the goal of 16.7% (see Chart J).

Barriers

Barriers to reducing LTCs reported by facilities included:

- Patients refusing to have a timely permanent access placement.

- Surgeon unavailable to place permanent accesses or conduct timely access interventions.

- Medical ineligibility for a permanent access.

- Insurance issues or no insurance.

- Rescheduling or missed appointments.

- Patient requiring multiple surgeries and/or access complications.

- Patients transitioning to home dialysis.

- Patients with Acute Kidney Injury (AKI) delayed processes or no process in place.

Interventions

Interventions for the QIA included:

- Distributing patient education tools, including tools that explained the:

    o Advantages of a permanent access versus a catheter.

    o Importance of hand hygiene and proper access care.

- Distributing resources to identify and maintain a facility Vascular Access (VA) manager.

- Encouraging use of a tracker for monitoring patient appointments.

- Collecting and trending facility data to conduct rapid cycle improvement.

- Distributing VA Appointment Sheets for patient reminders.

- Encouraging use of Network developed Quality Assurance and Performance Improvement (QAPI) forms.

- Conducting facility site visits to provide support and technical assistance.

- Providing additional education and sharing best practices gained through the ESRD National Coordinating Center (NCC) BSI QIA Learning and Action Network (LAN).

- Using a selected Facility Patient Representative (FPR) to assist with QIA activities and interventions.

Best Practices

Best practices identified by QIA facilities included:

- Conducting a meeting with the local surgeon(s) office(s) to address timely evaluation and placement of permanent accesses.

- Developing a process to provide VA education to patients upon initiation of dialysis.

- Referring patients to a vascular surgeon within two weeks upon initiation of dialysis.

- Establishing at least two VA Managers (VAM) if the LTC census is greater than 15.

- Using a tracking and monitoring process tool for addressing LTCs.

Chart J: Network 17: Long-term Catheter Rates (January–October 2019)

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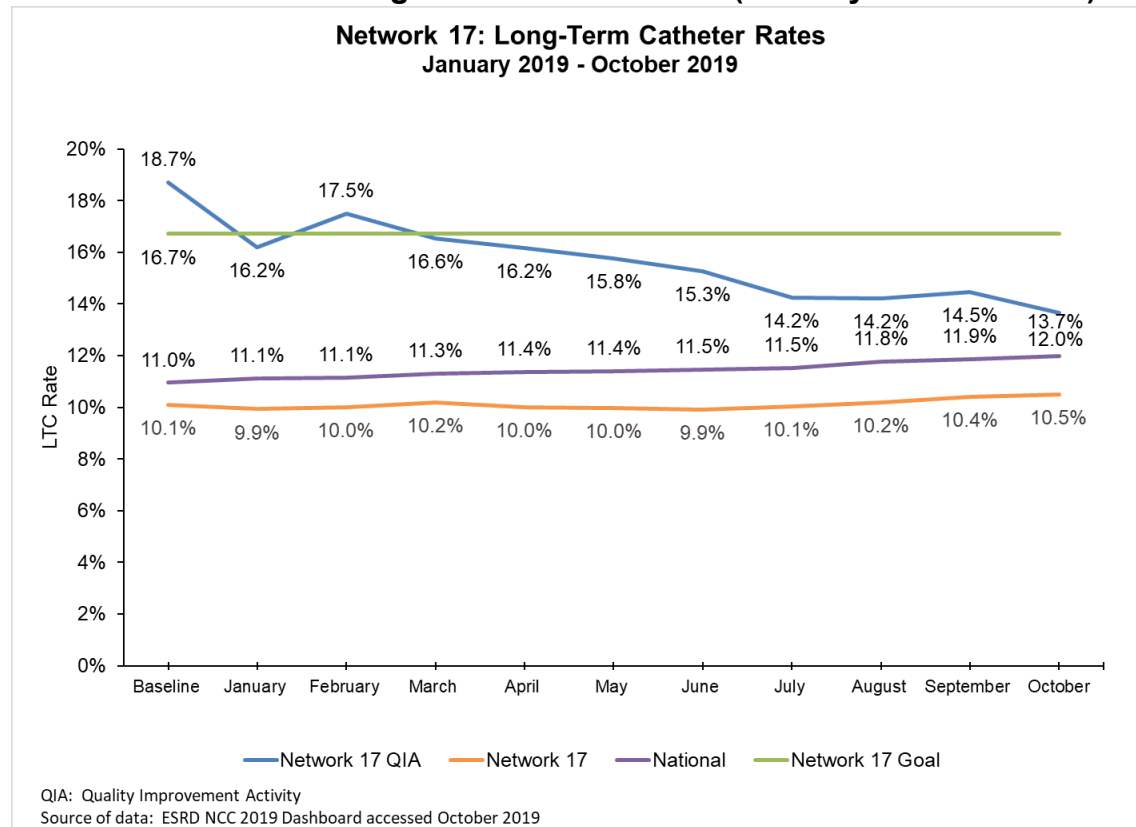
Bloodstream Infection (BSI) QIA

During 2019, the Network conducted a QIA to reduce dialysis event rates, specifically BSIs, by improving infection control practices. The QIA was designed to support the National Action Plan to Prevent Healthcare-Associated Infections (HAIs) and the Centers for Disease Control and Prevention (CDC) Core Interventions for Dialysis BSI Prevention Program. The QIA included 91 facilities and the measurement for Network success was based on the top 20.0% of the 50.0% of facilities in the cohort (N=36) with the highest BSI rates, impacting approximately 4,436 patients.

Goals and Outcomes

The Network used the National Healthcare Safety Network (NHSN) BSI pooled-mean rate per 100 patient-months to target facilities for the QIA. The goal was to achieve at least a 20.0% relative reduction in the pooled-mean rate of BSIs from January–June 2019 and to prevent at least 48 BSIs. By the conclusion of the QIA, the aggregate BSI rate decreased from 1.04 to 0.63, and 99 BSIs were prevented, exceeding the goal (See Chart K).

Barriers

Facilities reported the following barriers to further reducing BSIs at their facilities:

- Lack of staff focus on infection prevention techniques and event reporting.

- Poor patient compliance with hand washing and catheter care.

Interventions

Interventions implemented during the QIA included:

- Directing facilities to have staff complete the following training courses:
    - *Infection Prevention in the Dialysis Setting.*

    - *NHSN Dialysis Event Surveillance.*

- Distributing patient education related to hand hygiene.

- Disseminating the Network's interactive patient learning module, *Test your Hand Hygiene Knowledge.*

- Collecting and trending facility data to conduct rapid cycle improvement.

- Providing education on the CDC's *Core Interventions for Dialysis BSI Prevention*.

- Having facilities complete the CDC BSI prevention audit tools for staff.

- Providing additional education and sharing best practices gained through the ESRD NCC's BSI QIA LAN.

- Conducting facility site visits to provide support and technical assistance.

- Posting the CDC's *Days Since Last BSI* poster in the facility.

- Having patients complete CDC BSI prevention hand hygiene audit tools on staff.

- Obtaining access to a Health Information Exchange (HIE) or another evidence-based highly effective information transfer system.

- Using the Network's *Medical Records Request* form to obtain hospital records.

- Reviewing BSIs in QAPI meetings using the Network's *BSI QIA QAPI Form*.

- Using a selected Network Patient Representative (NPR) to assist with QIA activities and interventions.

Best Practices

Facilities reported that having patients complete monthly hand hygiene audits was a best practice for the QIA. Evaluation results indicated that facilities plan to continue using the patient education provided by the Network, as well as the CDC infection control audits and *Days Since Last BSI poster*, for sustainability of gains made during the QIA. By September 30, 2019, 98.5% of all dialysis facilities completed the *NHSN Dialysis Event Surveillance Training,* and 55.0% of facilities included in the QIA group had gained access to an HIE or another evidence-based highly effective information transfer system (see Charts L and M).

Chart K: Network 17: Reduction in BSIs in QIA Facilities

Network 17: Reduction in Bloodstream Infections (BSI) in QIA Facilities

Nationally, the Networks reduced 2,729 BSI in 2019

99

48

■ 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

Chart L: Network 17: Percent of Dialysis Facilities with At Least One Person Who has completed the NHSN Dialysis Event Surveillance Training (January–September 2019)
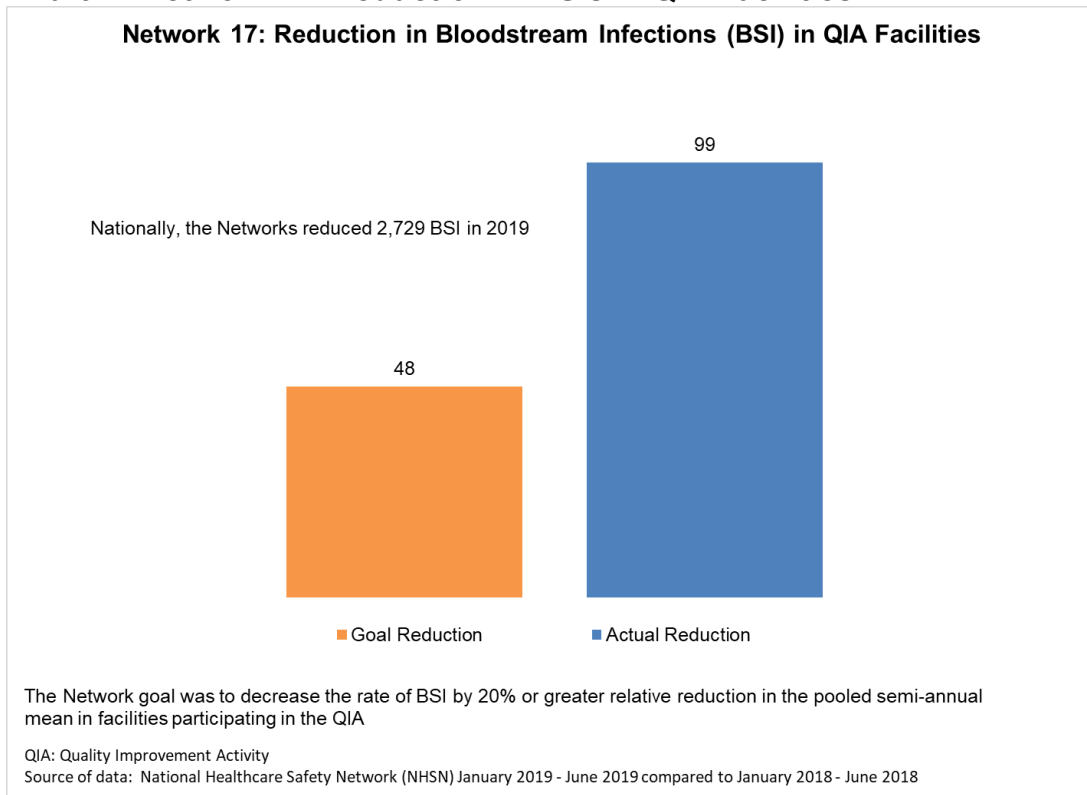

Network 17: Percent of Dialysis Facilities with At Least One Person Who Has Completed the NHSN Dialysis Event Surveillance Training
January 2019 - September 2019

Network 17 values: 0.0%, 15.2%, 51.3%, 68.8%, 89.0%, 98.1%, 98.1%, 98.5%, 98.5%, 98.5%

National values: 0.0%, 8.3%, 20.9%, 37.0%, 64.7%, 76.5%, 83.1%, 88.3%, 93.3%, 95.2%

Network 17 Goal: 90.0%

Legend: Network 17 — National — Network 17 Goal

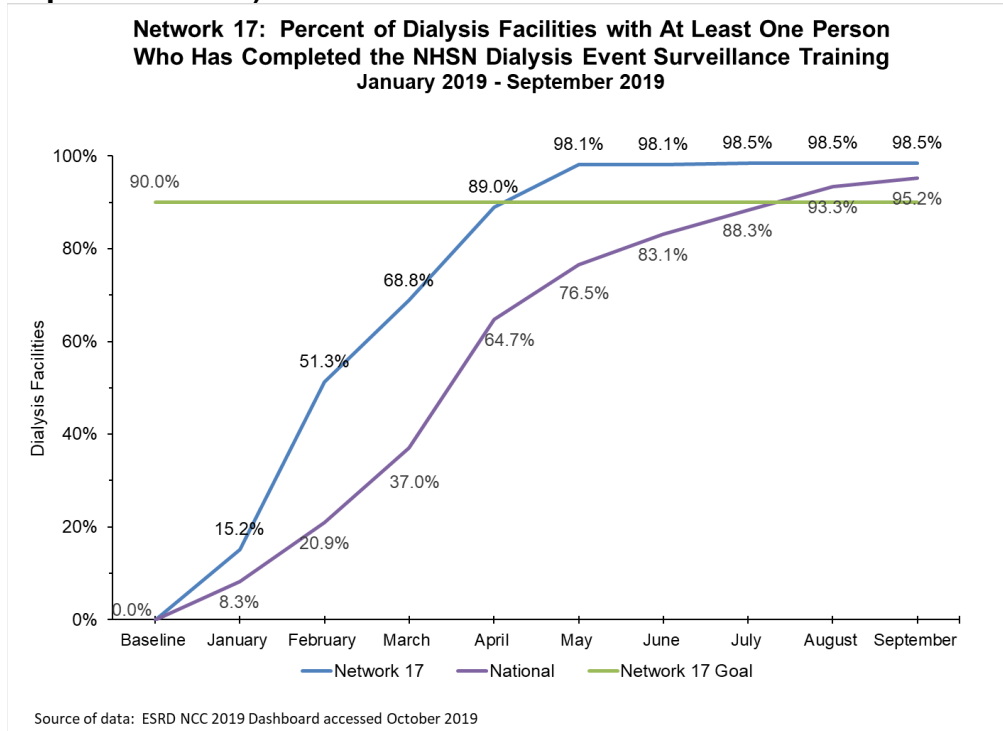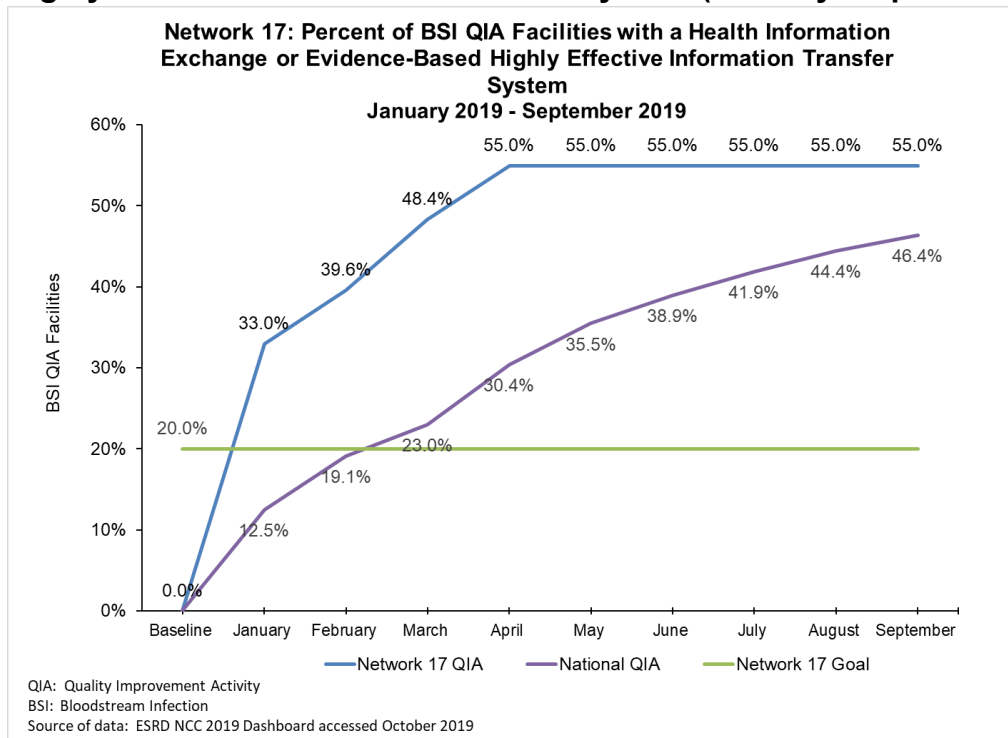Source of data: ESRD NCC 2019 Dashboard accessed October 2019

Chart M: Network 17: Percent of BSI QIA Facilities with a HIE or Evidence-Based Highly Effective Information Transfer System (January–September 2019)

Network 17: Percent of BSI QIA Facilities with a Health Information Exchange or Evidence-Based Highly Effective Information Transfer System
January 2019 - September 2019

Network 17 QIA values: 0.0%, 33.0%, 39.6%, 48.4%, 55.0%, 55.0%, 55.0%, 55.0%, 55.0%, 55.0%

National QIA values: 0.0%, 12.5%, 19.1%, 23.0%, 30.4%, 35.5%, 38.9%, 41.9%, 44.4%, 46.4%

Network 17 Goal: 20.0%

Legend: Network 17 QIA — National QIA — Network 17 Goal

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

Transplant Waitlist QIA

The 2019 Transplant Waitlist QIA was intended to increase the number of ESRD patients added to a transplant waitlist. The Network identified 87 dialysis facilities with historically low rates of adding patients to a transplant list for inclusion in the QIA, impacting approximately 7,600 hemodialysis patients.

Goals and Outcomes

The goal of the QIA was to add 396 patients to a transplant waitlist. At the end of the QIA, in September 2019, the final rate was 2.8%, indicating the addition of 288 patients to a transplant waitlist. This was a 72.7% achievement toward the total goal (see Chart N).

Barriers

Barriers to meeting the QIA goals included:

- Patient refusals.

- Lack of a structured communication process between the dialysis facilities and transplant centers.

- Patients being unable to meet the criteria for transplant referral or being unable to complete the work-up.

- Long wait times between referral and evaluation.

Interventions

The Network addressed each of the barriers indicated above with the following interventions:
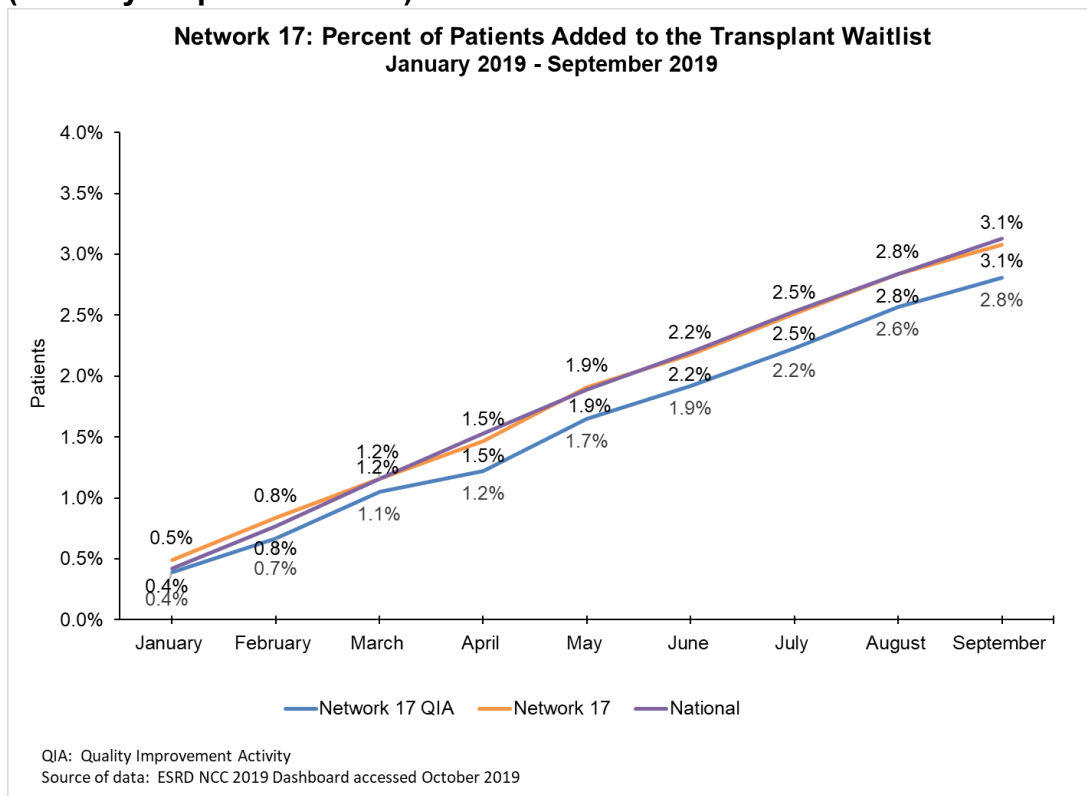
- To address the large number of patient refusals, the Network created a resource that the facilities could use to ask patients why they were not interested in pursuing a transplant. Facilities collected the responses and reported the results to the Network.

   o Based on results collected from the facilities, and feedback from Network Patient Subject Matter Experts (PSMEs), two additional interventions were developed:
      ▪ A transplant referral guide.
      ▪ A transplant preparation checklist.

- The Network encouraged the QIA facilities to build a workable, structured communication process with the transplant centers with the goal of successfully tracking patients and exchanging information to expedite the referral and evaluation process. To achieve this, the Network:

   o Shared best practices identified by QIA facilities and the ESRD NCC Transplant QIA LAN.

   o Followed up with transplant centers to address the length of time patients wait between referral and the education class and/or the start of evaluation.

- To ensure proper tracking and documentation of each patient's movement through the steps to transplant wait listing, the Network encouraged the use of internal trackers, and created and disseminated a transplant tracker for use by QIA facilities as an alternative.

   o The tracker could also be used for ease in completing monthly QIA reporting to the Network.

Best Practices

Best Practices identified from the QIA include:

- Building better communication processes with transplant centers for exchanging information.

- Referring patients to more than one transplant center if they meet the criteria.

- Using a tracking tool to follow patients through the transplant waitlist process.

- Conducting educational Lobby Days and inviting a previously transplanted patient to attend to create interest in transplant.

- Educating patients and staff on transplant, the waitlist process, and referral criteria.

- Using the *Let's Get Started* Checklist to help prepare patients for the referral and evaluation process.

Chart N: Network 17: Percent of Patients Added to the Transplant Waitlist (January–September 2019)

Network 17: Percent of Patients Added to the Transplant Waitlist
January 2019 - September 2019

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

Home Therapy QIA

In 2019, the Network conducted a QIA to support the CMS goal of increasing the number of ESRD patients dialyzing at home by two percentage points over the natural trend for a target group of dialysis facilities. The Network identified 75 dialysis facilities (30.0%) for inclusion in the QIA, impacting approximately 7,420 patients.

Goals and Outcomes

The goal for the QIA was to transition 432 patients to home dialysis, By September 2019, the final QIA rate was 5.3%, indicating 419 patients transitioned to home dialysis, which is 96.9% toward the Network's goal. (see Chart O)

Barriers

Barriers to meeting QIA goals included:

- Insufficient home dialysis staff to educate and train patients.

- Lack of a home dialysis program within the in-center facility, necessitating patient referral to another facility.

- Dialysis facility staff turnover with subsequent decrease in staff engagement for the QIA.

- Many facilities experienced minimal growth in patient population or had a consistently low patient census.

    o Many facilities also had a patient population that experienced multiple medical comorbidities and/or had minimal support at home.

- Many long-term in-center patients were not interested in changing modalities.

    o Patients enjoy the peer-to-peer socialization within the in-center chronic setting and prefer that facility staff manage their treatments.

- Lack of a formal tracking process for timely follow-up of patients in need of education and referral.

- Physician-related barriers such as lack of education or interest in home modalities or an unwillingness to refer patients outside of the facility.
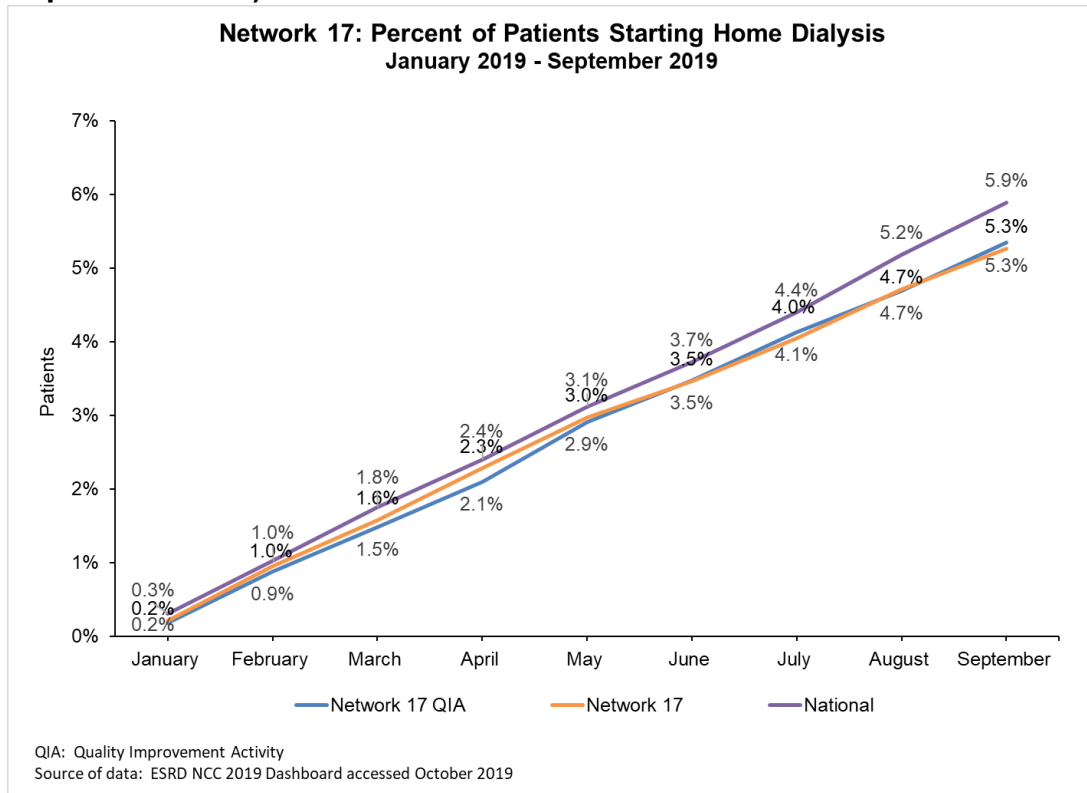
Interventions

The following interventions were implemented over the course of the QIA:

- Promoting communication between physicians, case managers, in-center and home dialysis programs.

- Providing educational resources to referring physicians and discharge planners in support of early patient education.

- Collecting monthly reporting from QIA facilities to show the progression of patients from referral to training, as well as implementation of QIA activities.

- Using a home dialysis patient tracker to monitor patients through the steps to home dialysis.

- Collaborating with a home dialysis program to educate staff, patients, and their caregivers regarding home dialysis.

- o   To include the facility's Home Champion and Peer Mentor, if available.
- Hosting a home dialysis Lobby Day with assistance from a home program.
    - o   To include an existing home patient and/or caregiver, if available.
- Providing home dialysis resources, to include:
    - o   *How I Took the Road Home* video, poster and handout.
    - o   *Uncovering Myths about Home Dialysis* booklet.
    - o   *Consider Your Dialysis Choice* handout.
- Engaging the facility's Peer Mentor(s) and/or NPR(s) to assist with implementation of the QIA, if available.
- Discussing the Home Dialysis QIA with the Interdisciplinary Team (IDT) in the monthly QAPI meeting.

Chart O: Network 17: Percent of Patients Starting Home Dialysis (January–September 2019)

Network 17: Percent of Patients Starting Home Dialysis
January 2019 - September 2019

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

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Population Health Focus Pilot Project Quality Improvement Activity

The End Stage Renal Disease (ESRD) Network 17 conducted a QIA focused on assisting ESRD patients with seeking gainful employment and/or returning to work or school. The Network identified 29 facilities which were 10.0% of dialysis facilities in the service area where ≤25.0% of the eligible target population (patients 18–55 years old) who had not met the desired outcome. The Network collaborated with local vocational rehabilitation (VR) programs, employment networks (ENs) and the Ticket to Work program while encouraging facility staff to communicate with their local programs to increase their knowledge of the referral process for patients.

Goals and Outcomes

The primary goal of the QIA was to screen and monitor 100.0% of the facility eligible patient population for interest in VR or EN program participation. The Network then aimed to increase the number of eligible patients referred to VR or EN programs by at least 10.0% from the facility baseline rate. Finally, the Network was directed to increase the number of eligible patients receiving VR or EN services by at least 5.0% from the facility baseline by September 2019.

Based on CROWNWeb (CW) data from October 2017–June 2018, the 29 QIA facilities had a baseline rate of 0.0%, representing patients screened, referred and receiving services from VR or EN programs. At the completion of the QIA in September, the patient screening rate reached 100.0%, the patient referral rate was 47.4%, exceeding the goal of 10.0%, and the rate of patients receiving VR or EN services was 13.3%, again exceeding the goal of 5.0%. (see Charts P and Q)

Barriers

Barriers to achieving the QIA goals included:

- Inaccurate data caused by the lack of updating reported information in the CROWNWeb system due to:
  - QIA Leads who were typically facility social workers and did not have access to CROWNWeb.
  - Lack of staff education about the importance of the updating patient VR status in CROWNWeb once they are screened, referred and start receiving VR services.
  - Lack of a process for discussing patient status and VR trends in the monthly QAPI meetings.
- Patients are fearful of losing their health-insurance and financial benefits.
  - Many patients receiving Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI) often misunderstand and/or are not educated on benefit planning or work options.
    - Facilities reported that many patients believe returning to work or school will disqualify them for benefits and income through the federal system.
  - Lack of education of staff and patients in QIA facilities about the availability of EN/VR services, how they can be used to maximize patient income, and benefits for people interested in returning to work or school.
- Facilities report that most of their patients are disease burdened, experience frequent hospitalizations, and have low levels of independence.

Interventions

The Network conducted root cause analysis (RCA) to identify general interventions and facility-specific interventions along with feedback from the Network Council, Board of Directors, and PSMEs. Network interventions included:

- Providing staff education to increase their knowledge of VR/EN resources to identify patient interest and better assist them through the VR/EN process.

    o This included disseminating LAN best practices to ensure the success of the QIA facilities.

- Disseminating patient educational resources regarding available VR/EN services and how to access them in addition to sharing patient testimonials for increasing patient engagement and interest.

- Identifying more than one CROWNWeb user in each facility to be responsible for entering VR/EN data into CROWNWeb.

    o Technical assistance was be provided to ensure all patients are screened and assessed for interest then accurately documented in CROWNWeb.

    o A CROWNWeb documentation tool was created and disseminated by the Network to support this task.

- Providing VR/EN supportive resources to assist the facility QIA leads with establishing routine monitoring and tracking patient status in CROWNWeb to ensure:

    o The screening of all patients eligible and interested in VR/EN services,

    o The tracking of patients referred to VR/EN and who are currently receiving services.

- Providing all QIA facilities with a VR QIA QAPI Form to assist the IDT with identifying and discussing patient VR/EN status during the monthly facility meetings.

    o The form also directed the team to enlist feedback from a patient and/or family member who has been through the process to identify possible barriers for interested patients.

- Partnering with VR and/or EN service providers to address the facility referral processes, patient-level barriers and the development of patient-level resources for facilities and patients.

- Collecting monthly data from the QIA facilities related to completed screenings and referrals, the number of patients receiving services and the documentation of patient status in CROWNWeb.

    o Monthly reporting will also include QIA and LAN interventions implemented by the facilities and feedback on the usefulness of those interventions.

Best Practices

Best practices identified throughout the QIA by facilities include:

- Providing patients with educational resources to dispel the myths about losing financial or medical benefits if they returned to school or work.

- Tracking and monitoring patients screened and referred to VR/EN services.

- Hosting a VR Lobby Day and/or creating a VR bulletin board as a means of sharing educational resources on the benefits of returning to school or work.

Chart P: Network 17: Percent of Eligible Patients Referred to an EN or a VR Agency (February–September 2019)
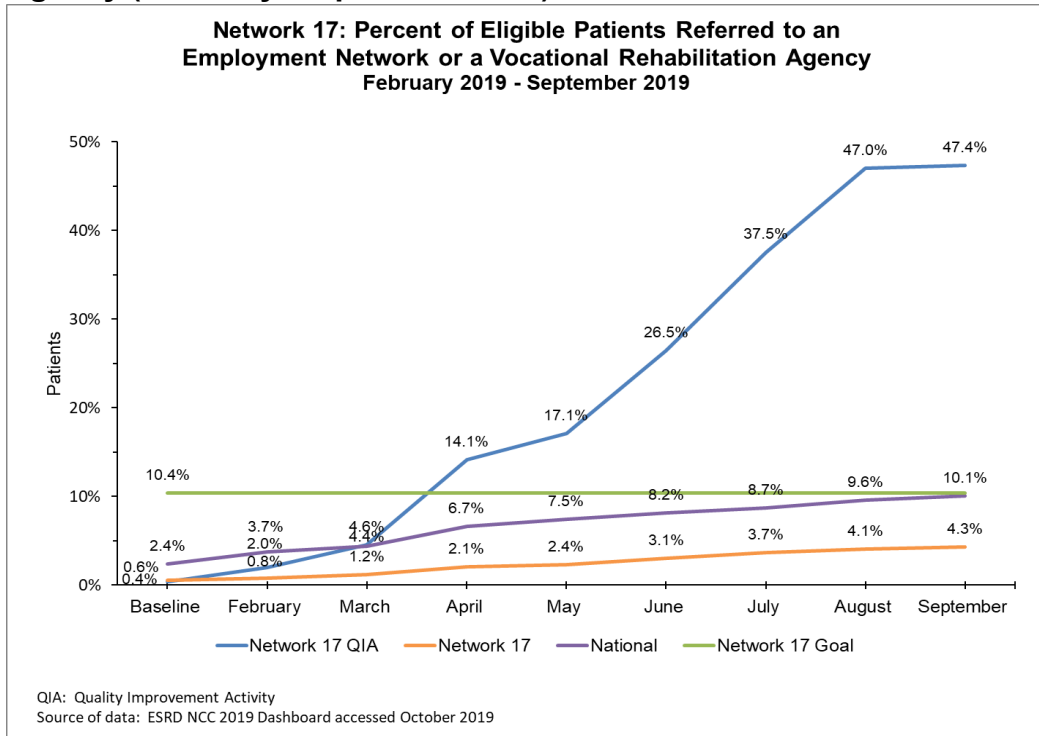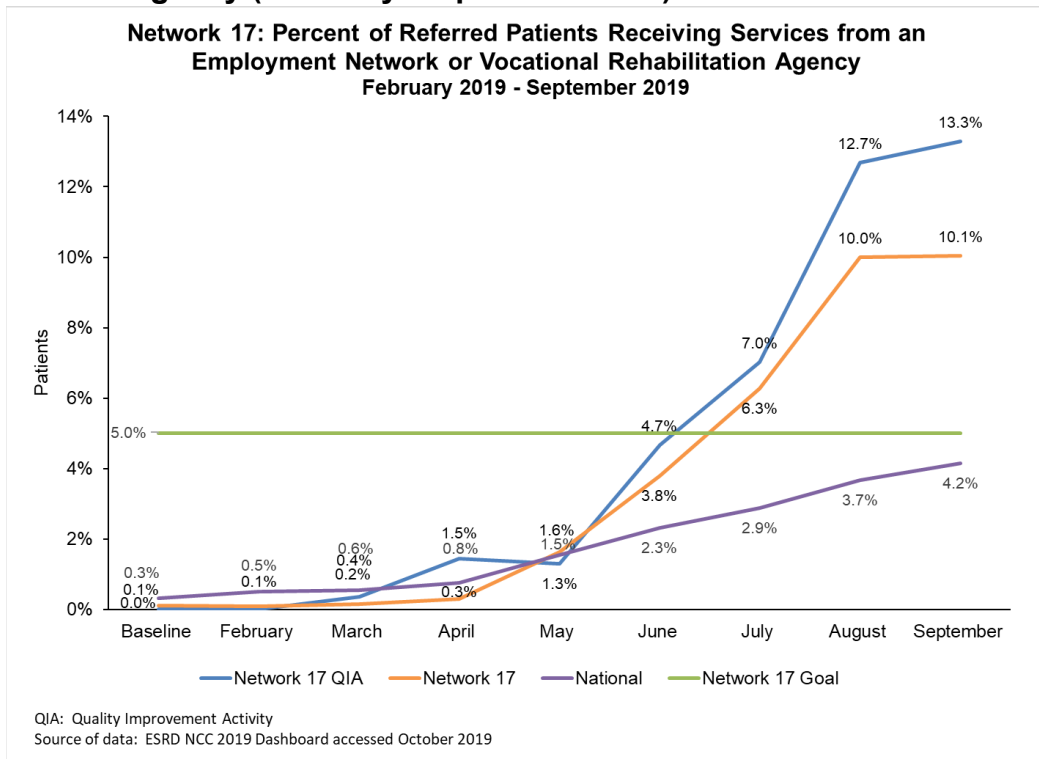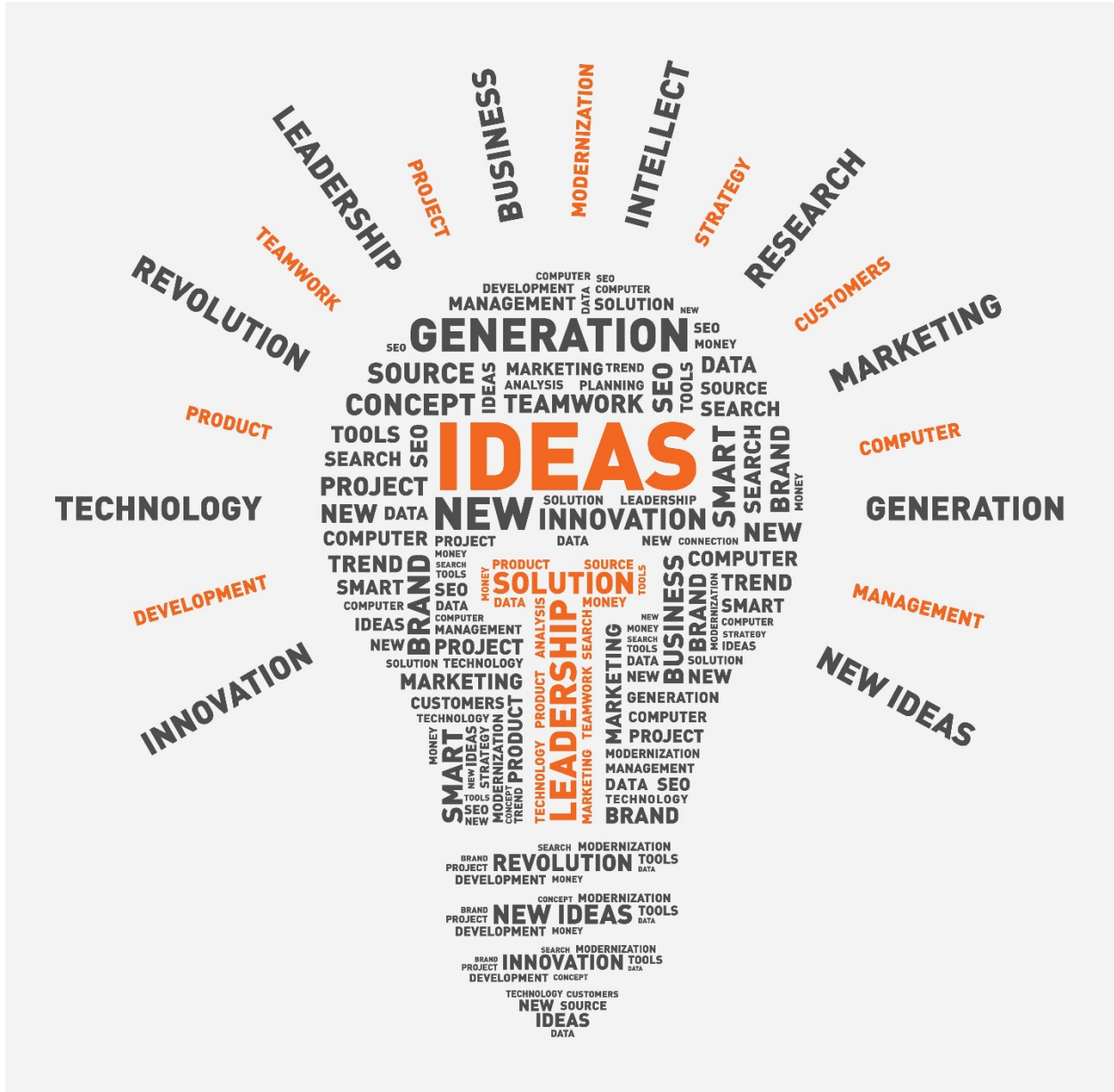

Network 17: Percent of Eligible Patients Referred to an Employment Network or a Vocational Rehabilitation Agency
February 2019 - September 2019

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

Chart Q: Network 17: Percent of Referred Patients Receiving Services from an EN or a VR Agency (February–September 2019)

Network 17: 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

Recommendations for Sanction

Section 1881(c) of the Social Security Act states that the ESRD Network can recommend to Centers for Medicare & Medicaid Services (CMS) the imposition of a sanction when an ESRD provider is not cooperating in achieving Network goals. The Federal Regulations that implement this statute are found in 42 CFR §405.2181. The Network maintained a cooperative and collaborative partnership with ESRD providers in all activities in 2019. The Network regularly interacted with facilities regarding QIAs and projects, patient grievances, data reporting, and the provision of technical assistance and education.

In 2019, the Network did not identify any facilities that warranted a recommendation for sanctions.

Recommendations to CMS for Additional Services or Facilities

During 2019, the Network did not identify a need for additional services or facilities in the Network 17 service area.

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION

ESRD Network 17 is tasked with providing support to dialysis facilities related to emergency preparedness, planning, and response. The Network conducts a risk assessment and submits an emergency plan annually to CMS. The Network works closely with the Kidney Community Emergency Response (KCER) Program and other stakeholders to ensure patients have access to dialysis before and after an emergency event.

When a storm is approaching, the Network issues weather preparedness alerts to facilities in the affected areas. The Network collects information from facilities related to planned closures prior to an event and then monitors and tracks the open and closed status of facilities and the location of patients during the response. Support and resources regarding disaster preparedness and response are also provided to patients and staff who contact the Network's toll-free helpline.

Below are the emergency events Network 17 responded to during 2019.

February 2019: Winter Storm Nadia

The Network monitored Winter Storm Nadia, which impacted much of Northern California beginning February 13, 2019. The storm brought high winds, heavy rain, flooding, road closures, and power outages. Four facilities experienced power disruptions but were able to re-open the following day. The Network provided support and remained in contact with facility staff and provided status reporting to KCER and CMS related to the incident.

February 2019: Typhoon Wutip

The Network began facility outreach to dialysis facilities in Guam and Saipan related to Typhoon Wutip on February 21, 2019. The facilities in Guam prepared for the storm, educated patients on disaster procedures, and planned for an early closing prior to the arrival of dangerous weather conditions. The facilities in the Commonwealth of Northern Mariana Islands checked all generators and ensured that the facilities had adequate fuel and water supply. Operations were not disrupted. All patients were accounted for on February 23, 2019.

February 2019: Flooding

On February 28, 2019, the Network monitored a flash flood and possible landslide warning due to winter storms near Russian River in Butte and Sonoma Counties, CA. Approximately 4,000 residents in Sonoma County were evacuated and the Governor issued an Emergency Proclamation for 21 counties. None of the nearby facilities were affected, but some roads were closed briefly due to mud and debris flow.

June 2019: Planned Public Safety Power Shutoffs (PSPS)

On June 18, 2019, the Network was notified of a possible PSPS for five days in parts of Calaveras and Tuolumne counties in California's high-risk wildfire areas due to high winds and dry conditions. Facilities located in those counties were not impacted.

July 2019: Hurricane Barbara

The Network started monitoring Tropical Storm Barbara on July 1, 2019, which escalated to hurricane status on July 3, 2019 in Hawaii. None of the facilities or patients were impacted.

July 2019: Maui brush fires

The Network began monitoring large brush fires on Maui on July 12, 2019. One facility sheltered two patients in place overnight until the roads were safe for their transportation to return.

July 2019: Tropical Storms Erick and Flossie

The Network began monitoring two weather systems over Hawaii on July 31, 2019. None of the facilities or patients were impacted.

September 2019: PSPS

Pacific Gas & Electric (PG&E) notified seven counties in Northern California about potential power shutoffs due to the potential fire risk based on the forecasted weather conditions. One facility was impacted during the first round of PSPS. Eight patients and staff were sent to a nearby facility that day and returned the following day for treatment after the facility received and connected a generator.

October 2019: Super Typhoon Hagibis

The Network began facility outreach and support to the Guam and Northern Mariana Islands dialysis facilities related to Tropical Storm Hagibis on October 6, 2019, which grew to super typhoon status on October 7, 2019. The Governor declared a state of emergency. Island-wide power outages were reported on Saipan and a precautionary boil water notice was issued. Facilities in Guam and Saipan were closed for one day until they were able to run on generator power. By October 10, 2019, all patients were accounted for, and the facilities were back on municipal power and water.

October 2019: PSPS

PG&E announced additional PSPS throughout much of California, including over 30 counties in Northern California, in October 2019. The PSPS were ordered to protect public safety from wildfire due to gusty winds and dry conditions, and to allow time for crews to inspect and repair damaged equipment. Facilities provided disaster preparation education to all patients, including those in their home programs.

October 2019: Typhoon Bualoi

The Network began monitoring Typhoon Bualoi on October 19, 2019, which moved past the Commonwealth of the Northern Mariana Islands. An emergency declaration was made, and flash flood watch activated. One facility closed for one day in preparation for the typhoon. All patients were accounted for at both facilities on the island and neither experienced any electricity or water issues.

October 2019: Kincade Fire and ongoing PSPS

The Kincade Fire started on October 23, 2019, in Sonoma County, in Northern CA. It scorched over 77 thousand acres and was fully contained by November 6, 2019. The Governor declared a state of emergency and the California National Guard was activated. Multiple major roadways were closed and mandatory evacuations were ordered. All patients were accounted for. As many as 16 facilities were closed due to the Kincade Fire and ongoing PSPS. Several facilities were able to obtain generators and many assisted patients with transportation needs.

ACRONYM LIST APPENDIX

This appendix contains an acronym list created by the KPAC (Kidney Patient Advisory Council) of The National Forum of ESRD Networks. You can access the acronym list on The National Forum of ESRD Networks website. 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.

Acronym	Definition
BSI	Blood Stream Infection
CDC	Centers for Disease Control and Prevention
CDHE	Colorado Department of Health and Environment
CMS	Centers for Medicare & Medicaid Services
ESRD	End Stage Renal Disease
FDA	Food and Drug Administration
HAIs	Healthcare Associated Infections
HHS	Health and Human Services
HSAG	Health Services Advisory Group
HIE	Health Information Exchange
KCER	Kidney Community Emergency Response
LAN	Learning and Action Network
LTC	Long-Term Catheter
LDOs	Large Dialysis Organizations
PDSA	Plan Do Study Act: A cycle of improvement
PHFPQ	Population Health-Focused Pilot
PSME	Patient Subject Matter Expert
QAPI	Quality Assurance and Performance Improvement
QIA	Quality Improvement Activity
RCA	Root Cause Analysis
SME	Subject Matter Expert
UNOS	United Network for Organ Sharing