

ESRD NETWORK 2017 ANNUAL REPORT

Description of the patient and facility population in the ESRD (End Stage Renal Disease) Network program and the outcomes of the quality improvement activities performed by this Network compared to the Network program performance

ESRD Network 18

Contents

ESRD DEMOGRAPHIC DATA..... 2

ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA 6

 Grievance Quality Improvement Activity 10

 ICH CAHPS Quality Improvement Activity 13

 Long Term Catheter Quality Improvement Activity..... 15

 Patient Safety: Reducing Rates of Healthcare-Acquired Infections Quality Improvement Activity..... 17

 Improve Vaccination Rates Quality Improvement Activity..... 19

 Hospitalization Reduction Quality Improvement Activity21

 Quality Incentive Program (QIP) Quality Improvement Activity23

 NHSN Data Quality Improvement Activity.....25

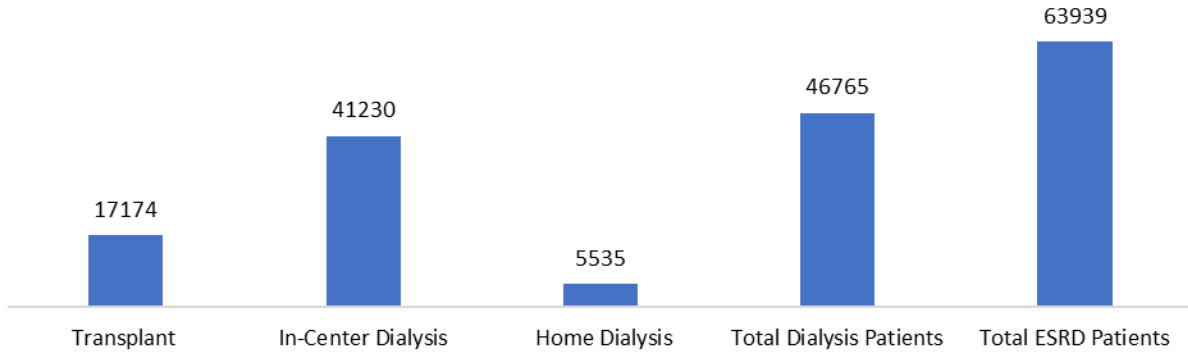
ESRD NETWORK RECOMMENDATIONS..... 26

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION 28

ESRD DEMOGRAPHIC

DATA

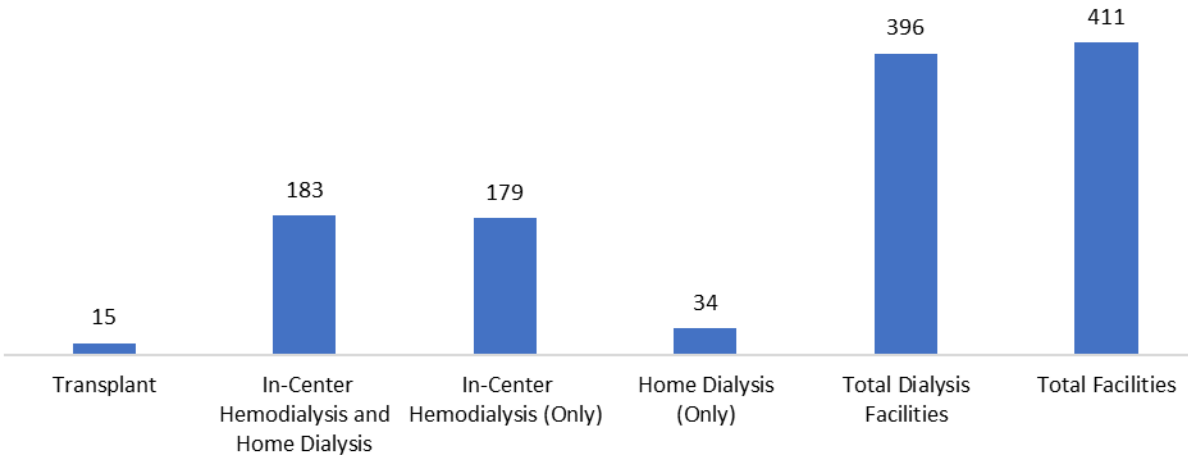
**Network 18: Prevalent ESRD Patients by Treatment Modality
As of December 31, 2017**



Total Dialysis Patients = In-Center Dialysis + Home Dialysis
 Total ESRD Patients = Transplant + Total Dialysis Patients

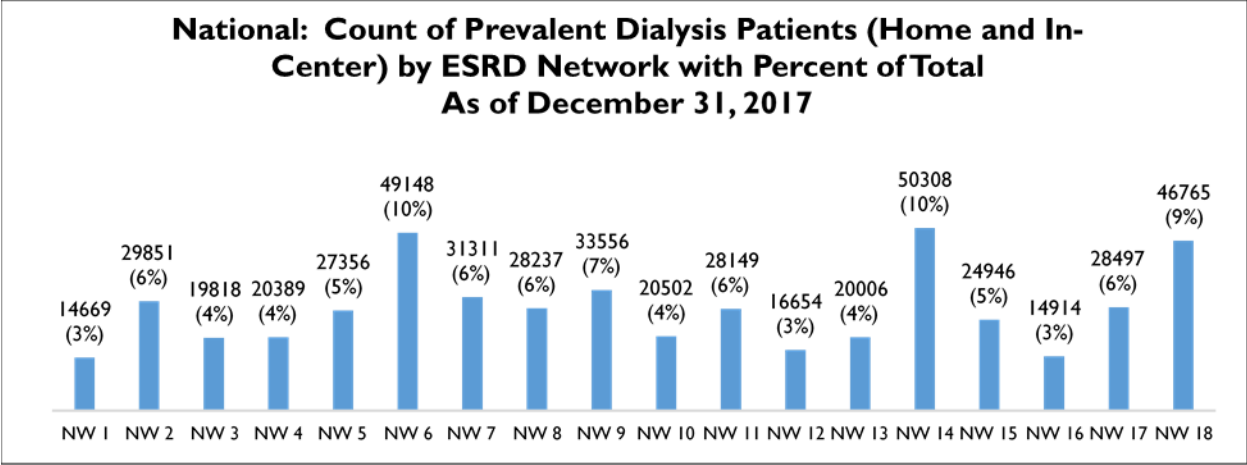
Source of data: CROWNWeb

**Network 18: Number of ESRD Medicare-Certified Facilities by Modality
Type Offered
As of December 31, 2017**

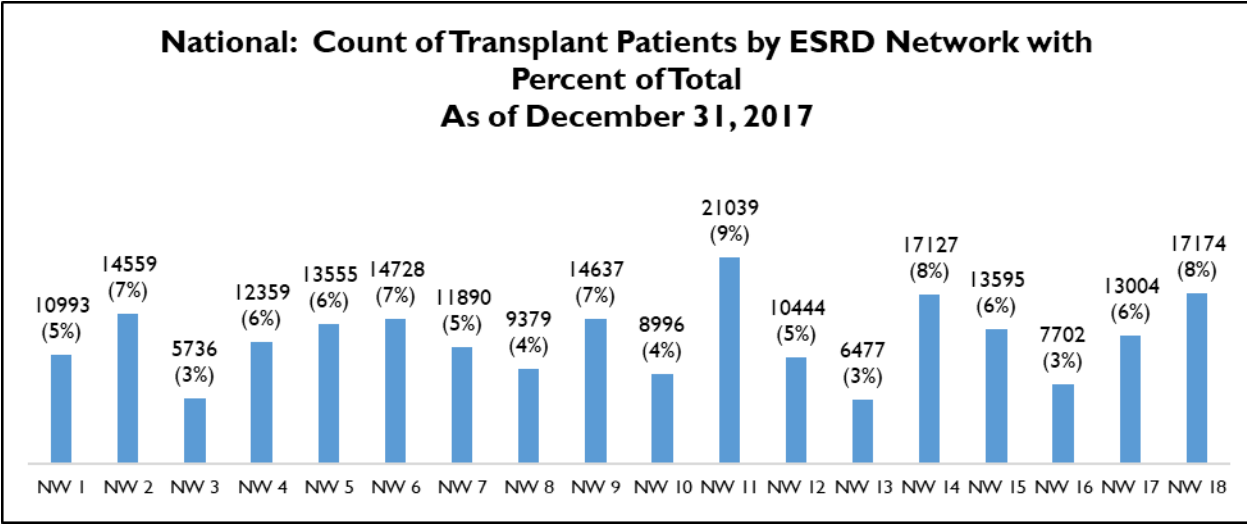


Total Dialysis Facilities = In-Center Hemodialysis and Home Dialysis + In-Center Hemodialysis (Only) + Home Dialysis (Only)
 Total Facilities = Transplant + Total Dialysis Facilities

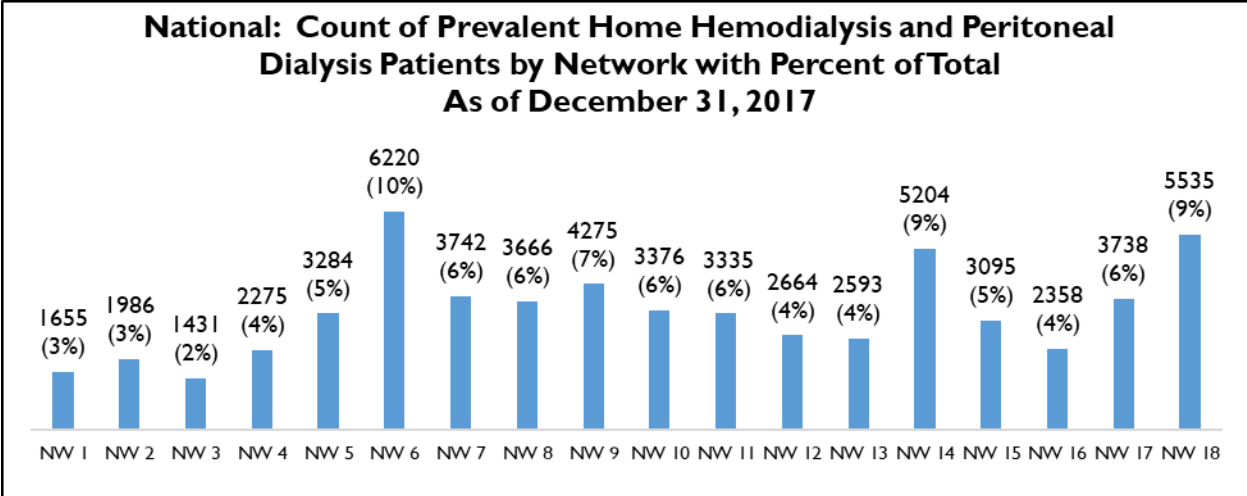
Source of data: CROWNWeb



Source of data: CROWNWeb

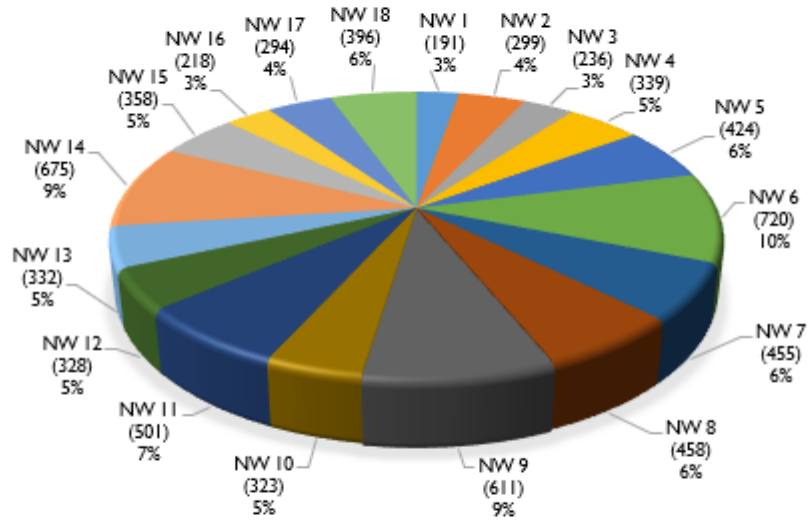


Source of data: CROWNWeb



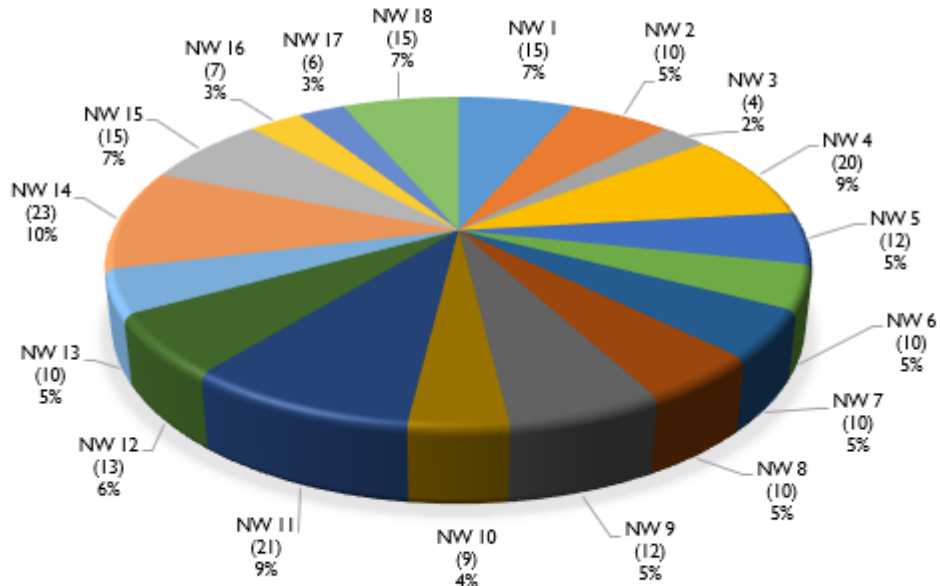
Source of data: CROWNWeb

National: Count of ESRD Medicare-Certified Dialysis Facilities by ESRD Network with Percent of Total As of December 31, 2017



Source of data: CROWNWeb

National: Count of ESRD Medicare-Certified Kidney Transplant Facilities by ESRD Network with Percent of Total As of December 31, 2017



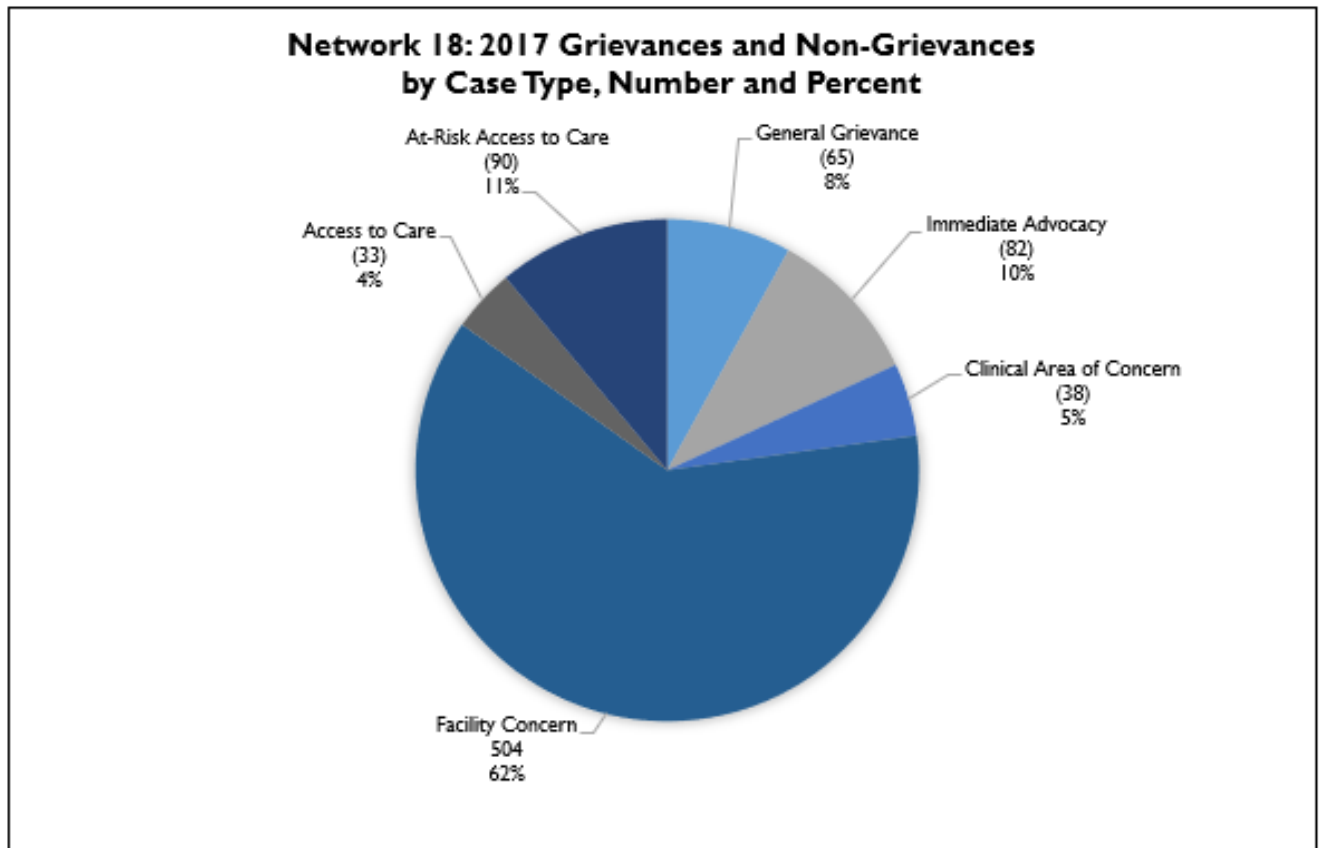
Source of data: CROWNWeb

ESRD NETWORK
GRIEVANCE AND ACCESS
TO CARE DATA

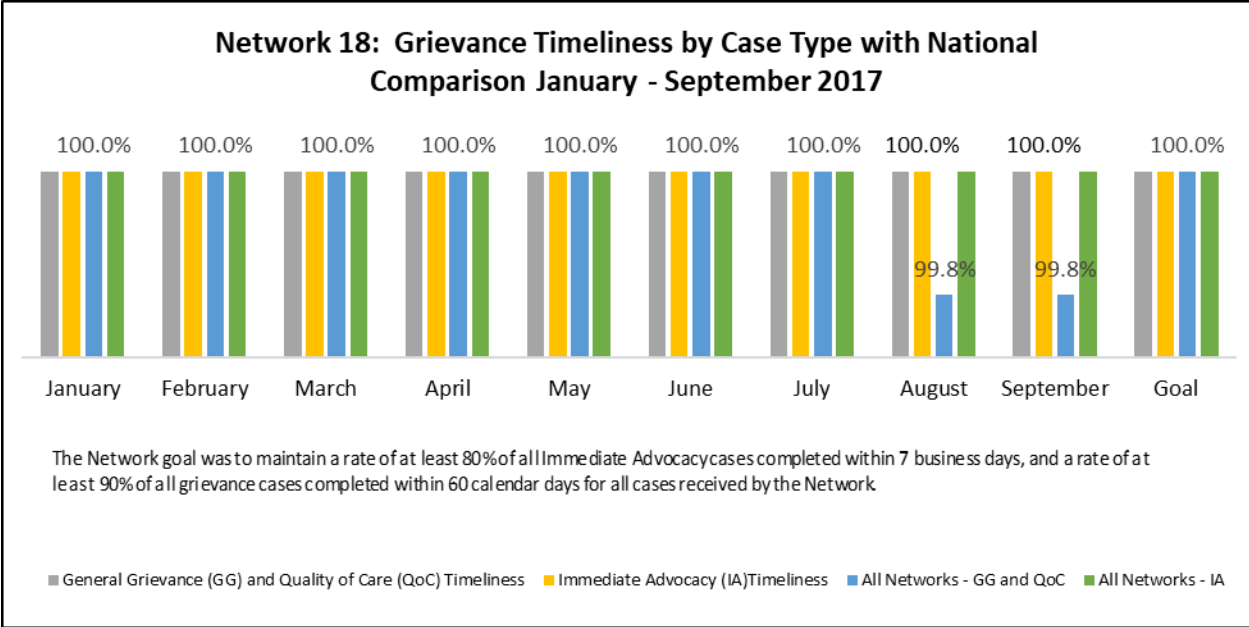
Network 18: Grievance Data for Calendar Year 2017

Category	Cases
Grievance Cases	185
General Grievance	65
Immediate Advocacy	82
Clinical Area of Concern	38
Non-Grievance Cases	627
Facility Concern	504
Access to Care: Confirmed Involuntary Transfer/Discharge (IVT/IVD)	33
At-Risk Access to Care	90
Additional Case Information	
Averted IVT/IVD	2
Failure to Place	0
Total Cases 2017	812

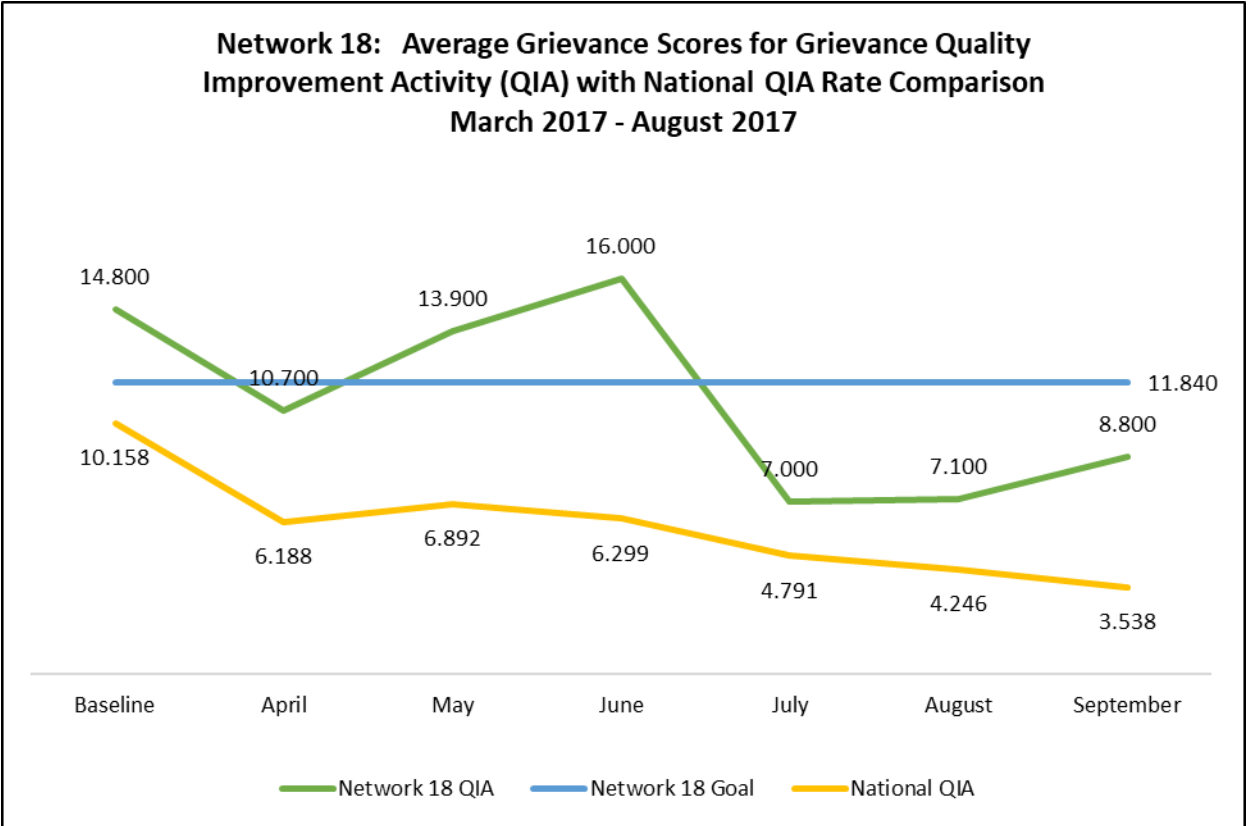
Source of data: Patient Contact Utility (PCU)



Source of data: Patient Contact Utility (PCU)



Source of data: October 2017 ESRD Network Dashboard



Source of data: October 2017 ESRD Network Dashboard

Grievance Quality Improvement Activity

Project Overview and Goals:

In compliance with the Statement of Work (SOW) Network 18 launched a QIA to address the facility grievance process in 10 dialysis facilities. The aim was to improve the utilization of the grievance process and improve communication between patients and staff at the selected facilities.

Concerns with communication are a main cause for grievances being filed with Network 18. The Network conducted a pre-intervention survey of all project facilities. 18% of staff reported that they need more time with patients. With the high-paced and often very busy nature of dialysis units, it was Network 18's goal to educate facilities that it takes no extra time and only minimal effort to improve communication and engage patients in conversation while providing care.

In an effort to improve communication between patients and staff, the Network developed a communication audit tool for patients to conduct observations of staff interaction and communication during a dialysis treatment: successful as well as missed opportunities.

Additional interventions focused on improving patient-centeredness, communication, and follow up once a grievance is filed:

- Non-verbal Communication Tool (English/Spanish)
- Grievance Logs/Letters
- Monthly facility RCA/PDSA based on trends
- *Are You Cold in Dialysis?* handout for patients
- *This is ME* (English and Spanish) tool for facilities to get to know their patients' preferences for communication and learning; and understand their patients in the context of their life outside dialysis
- Communication Audits
- Forum of ESRD Networks Grievance Toolkit

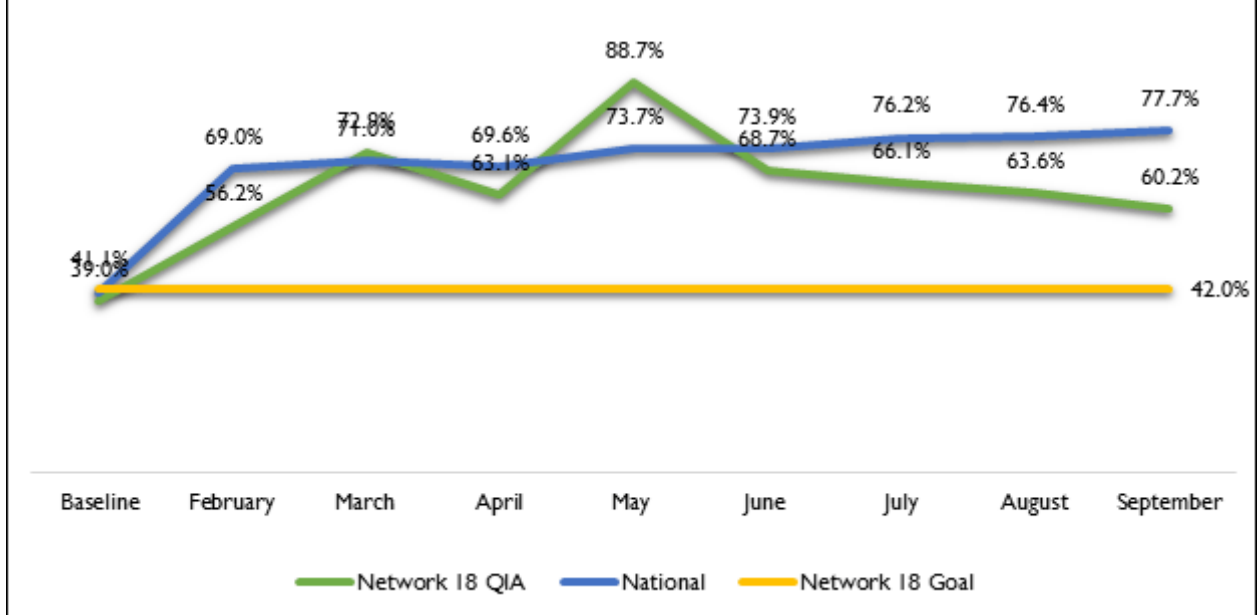
Successes:

At the conclusion of the QIA, Network 18 had project facility staff complete a post-intervention survey to determine whether the Communication Audit Tool had any impact on staff behavior. The results were promising:

- 61% reported that they increased communication with patients as a result of the communication audit being conducted.
- 83% reported that they will continue to interact more with patients after learning about the many opportunities they have during treatment to improve communication.
- 96% reported that they agree it is important to listen to patient concerns about the care they are receiving.

ESRD NETWORK QUALITY
IMPROVEMENT ACTIVITY
DATA

**Network 18: Percent of Patients in ICH CAHPS Quality Improvement Activity (QIA) Facilities that Indicated a Positive Change Related to the Network Selected ICH CAHPS Question
January 2017-September 2017**



Source of data: October 2017 ESRD Network Dashboard. Option 1 to use for Networks 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, and 18.

*In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS)

ICH CAHPS Quality Improvement Activity

Project Overview and Goals:

In compliance with the SOW Network 18 launched a QIA with 20 project facilities to address a single measure on the ICH CAHPS results administered during spring 2016. The measure that scored lowest and had the potential for positive change was Question 18:

In the last 3 months, has anyone on the dialysis center staff asked you about how your kidney disease affects other parts of your life? 39% of all Network 18 patients responded negatively with a “no.”

The aims of this project were to improve patient perception that staff care about how kidney disease affects the patient’s life outside of dialysis, and to increase the percentage of patients who report being asked about their quality of life outside of the dialysis setting. The Network was required to demonstrate at least a 5% improvement by September 2017.

Network 18 conducted the following interventions to improve patient perception of care:

- *Remember: Your patients have lives outside of dialysis* – a poster for staff with sample phrases and opportunities to show they care
- ICH CAHPS promotional flyer for patients (English/Spanish)
- *This is ME* (English and Spanish) tool for facilities to get to know their patients’ preferences for communication and learning; and understand their patients in the context of their life outside dialysis
- *What Your Renal Social Worker Can Do for You* – poster/handout for patients
- RCA/PDSA for facilities not meeting goals

Successes:

The CMS project goal was 5% relative improvement in ‘yes’ responses to the selected ICH CAHPS component. The baseline for this QIA was 39%, and the final measure in September was 60%. This represented a 21% relative improvement over baseline.

At the conclusion of the QIA, a post-QIA survey of facilities to determine the overall effectiveness of Network interventions was conducted. The results were as follows:

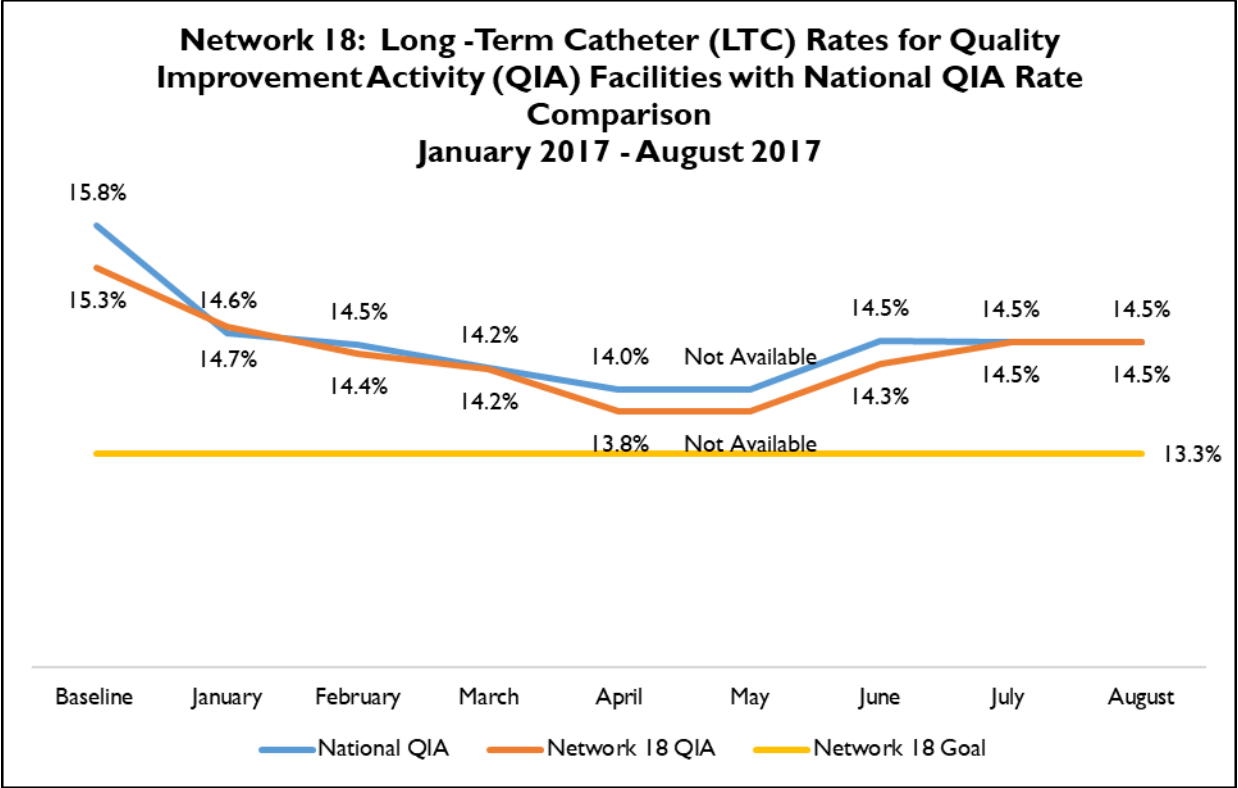
- 100% reported that communication from the Network was timely and effective
- 100% reported that the monthly data requirement was easy to complete
- 100% reported that the staff time it took to participate was reasonable
- The interventions that facilities found most helpful was the ICH CAHPS brochure (*Why is ICH CAHPS Important for Me?*)

For project sustainability, some facilities reported that they will:

- Built into their program the *This is Me* resource to review with new patients
- Ensure that goal setting and quality of life resources will be used with all patients intermittently
- Provide ‘person-centered’ education to all staff
- Receive feedback from patients that they see improvement in communication from staff

Barriers:

Even though no patients had to complete the one-question survey more than once, there were still facility reports of patients experiencing ‘survey burnout.’



Source of data: CROWNWeb

Long Term Catheter Quality Improvement Activity

Project Overview and Goals:

CMS set a target for all certified dialysis facilities to maintain a 10% or below rate of long-term catheters in use for the prevalent dialysis population. This project was designed to target facilities with a rate higher than 10%, with the goal to reduce the long-term catheter use rate by 2% or to bring the rate below 10%.

Participants completed a Root Cause Analysis (RCA) and formulated an action plan with their interdisciplinary team (IDT) at the onset and submitted updates on their progress to the Network monthly. These action plans addressed known barriers in the facility and implemented pre-established best-demonstrated practices, including racial and ethnic disparities, patient and staff education, nursing follow up and assessment, clinic-specific vascular access managers, access to surgeons with successful outcomes, advocating alternate access placement, and peer to peer education.

Successes:

Network 18 had 34 facilities - representing 3,809 patients - that reduced their long-term catheter rates by an average of 10% from baseline.

With the long-term catheter rate in Network 18 at 9.88% as of September 2017 FFCL, there is still room for improvement. The Network's facilities' rates ranged from 41.23% down to 12 facilities with zero long-term catheters.

Calls with individual facilities were held to discuss any obstacles and to create specific interventions and modifications to be addressed by choosing a goal, determining measurement of the goal, and making changes that result in improvement.

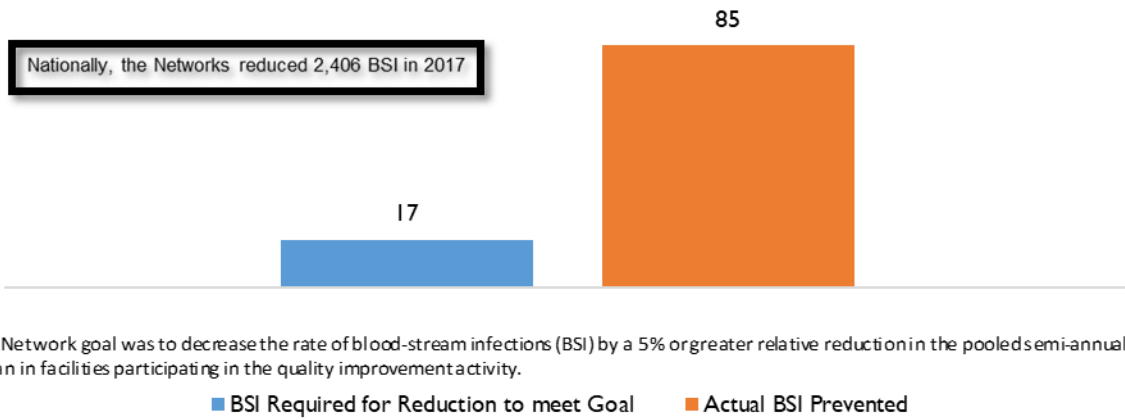
Network staff identified "champion" facilities that demonstrated strong outcomes through assessing historical catheter use trends, and recruited them to participate on the Network's Board of Directors, Medical Review Board, and as Subject Matter Experts (SME) to relay best practices to struggling facilities.

Improving a facility's system of access education, coordination of care, and training/placement of a vascular access manager, has established a system for quick evaluation and removal of long-term catheters that has continued after the project ended.

Barriers:

Common barriers identified through RCA discovered during the Plan-Do-Study-Act (PDSA) process were cited as: insurance issues, nephrologist education, and issues with local surgeons or vascular access facilities. Additional barriers included data lag, lack of surgeons, reimbursement for procedures, patient compliance, facility follow up, care coordination communication, lack of clinic relationships with vascular surgery/interventional radiologist, provider perception that the CMS goal was "unrealistic," and patients with all access sites exhausted.

Network 18: Bloodstream Infections (BSI) and Quality Improvement Activity (QIA) by ESRD Network



Source of data: June 2017 NHSN (National Healthcare Safety Network)

Patient Safety: Reducing Rates of Healthcare-Acquired Infections Quality Improvement Activity

Project Overview and Goals:

The goal of this project was to reduce dialysis events, defined by the Centers for Disease Control (CDC) National Health Safety Network (NHSN) protocol as signs of infection at the access site, positive blood cultures, and antimicrobial starts. Network 18 focused on reducing catheter infections, promoting antibiotic stewardship, and increasing sepsis awareness.

The BSI measure includes the number of dialysis events (numerator) and patient months (denominator). When selecting participants, preference went to facilities with a high census and high infection risk due to the increased impact. Per the contract, the bottom-20% of providers with the highest rates was included in the project.

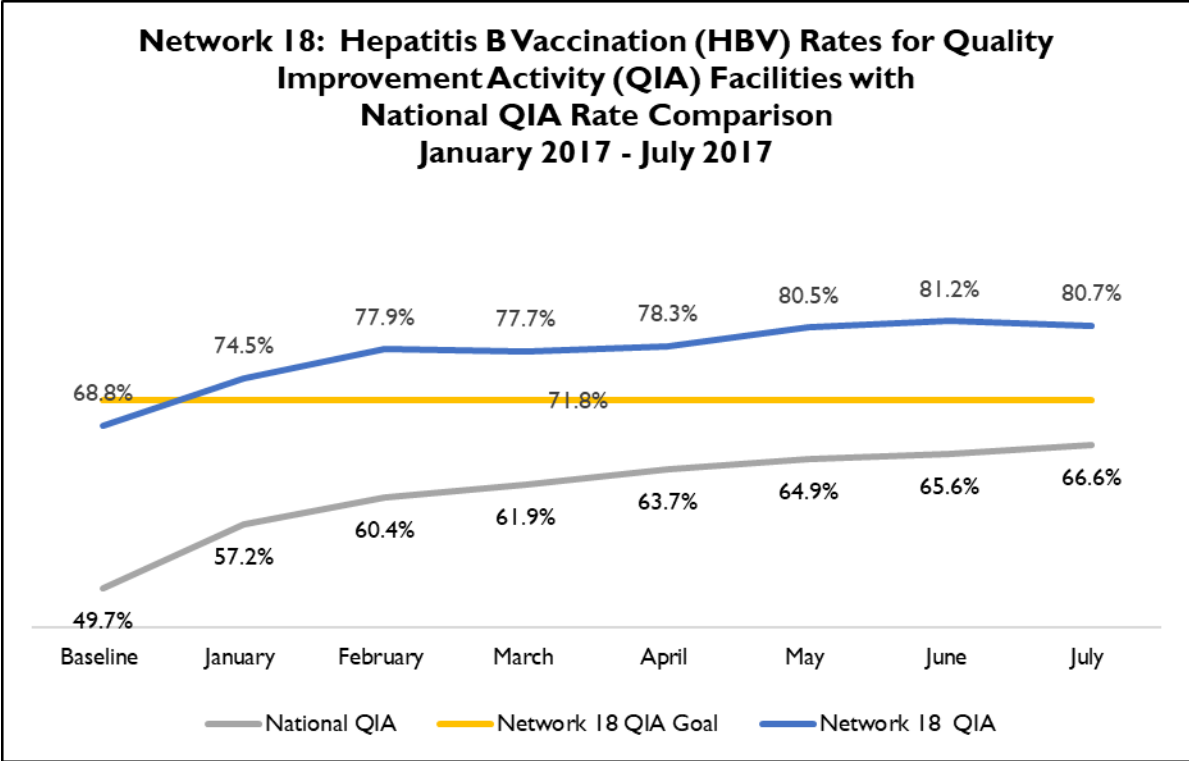
Successes:

While the goal was a minimum of 5% reduction in BSI rates, Network 18 had 68 participating facilities - representing 7,129 patients - with an aggregate baseline BSI of 1.07. Through their hard work, facilities reduced it to 0.68, a 36% overall reduction. In NHSN, the Network monitored the number of dialysis events, number of patient months, successful observations from the audits, and the pooled mean of BSI rates monthly to track the progress of the project.

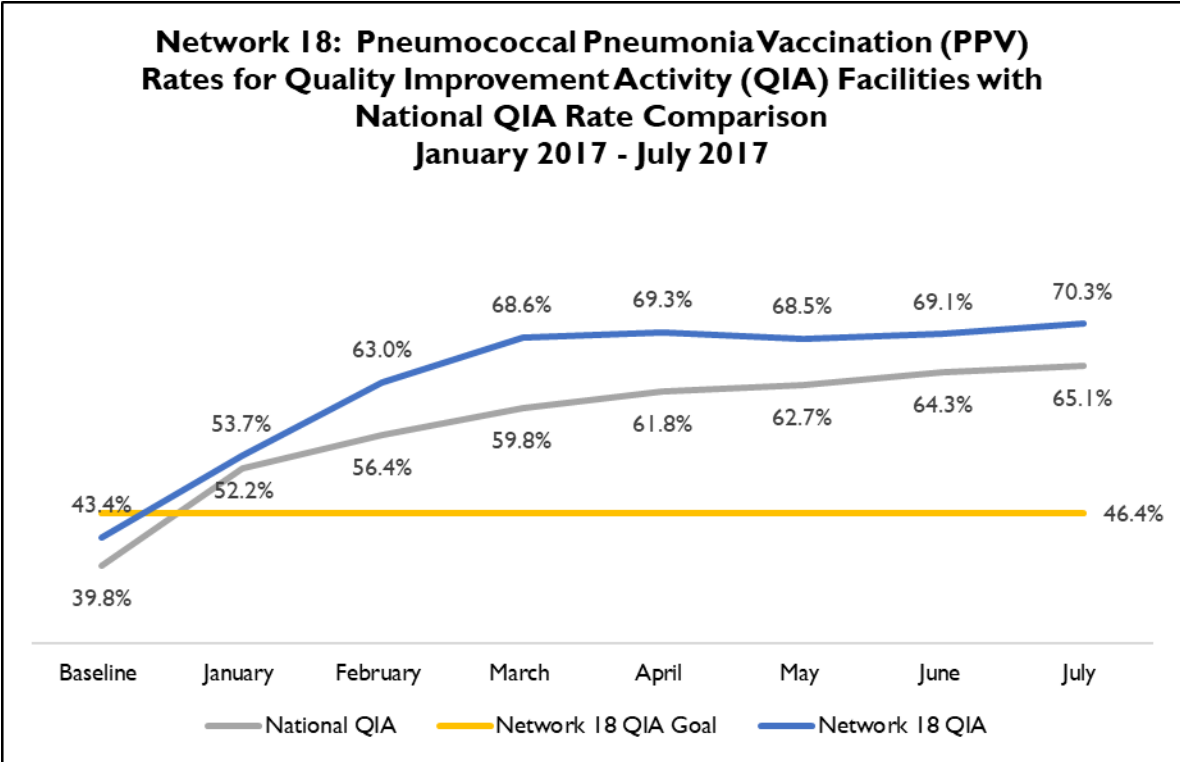
Central to the project was the implementation of the CDC audit tools in all participant clinics. Years of research, utilization in other Networks, and the project's success with the previous cohort in Network 18 all established the efficacy of CDC tools for reducing blood stream infections. Staff and patients at participant facilities audited hand hygiene, catheter site care, cannulation, dialysis station disinfection, and medication preparation. Project facilities recruited patients to complete a minimum number of hand hygiene audits every month; results of both patient and staff audits were reported and monitored monthly in NHSN. Facilities conducted RCAs to identify individual barriers and reported progress on a monthly basis, alongside monitoring their audit compliance within NHSN.

Additionally, Network 18 provided outside resources and subject matter experts to offer education to the staff. The Department of Health guested in a series of presentations spotlighting the various CDC audit tools and provided insight into troubleshooting the concerns facilities brought to their attention. A certified Wound Care RN instructed facilities in caring for active wounds, supporting diabetic patients who have infections, and preventing/monitoring wound infections.

Throughout 2017 Network 18 reinforced sepsis awareness by providing free CE opportunities, Network webinars, and resources to motivate/engage patients. Participants attended monthly webinars in which they presented their best practices to each other. CDC "Scrub the Hub" and cleaning agent guidelines were implemented in facilities that had not already adopted them.



Source of data: CROWNWeb



Source of data: CROWNWeb

Improve Vaccination Rates Quality Improvement Activity

Project Overview and Goals:

The goals of this project were to improve the safety of dialysis patients by ensuring vaccination compliance in accordance with CDC guidelines, and for dialysis providers to implement any updates to CDC recommendations in real time.

Network 18 significantly improved vaccination rates for both hepatitis and pneumonia in target facilities. At the end of the year 732 additional patients had received a Pneumococcal vaccine and an additional 400 patients completed the Hepatitis B series.

Measures for this project included all three vaccination types (the complete Hepatitis B series and both the PCV13 and the PPSV23) and facilities remained on the project until their rates for all three vaccinations were above 60% as reported in CROWNWeb. The Network selected participants from the lowest 10% of performers, targeting facilities with vaccination rates reported as low as 0%. Baseline was the 2016 CROWNWeb data with final measurement at the end of the third quarter of 2017.

Successes:

Network 18 project participants demonstrated a baseline Pneumococcal vaccination rate of 67.1% and a Hepatitis B vaccination rate of 41.2%, out of 2,667 eligible patients. The Network selected 24 project facilities, 13 of which met the criteria for graduation prior to the close of the project, and one facility closed during the course of the year. Overall, facilities increased the vaccination rates for Hepatitis B by 13% (from 55% to 68%) and Pneumococcal by 26% (from 57% to 83%).

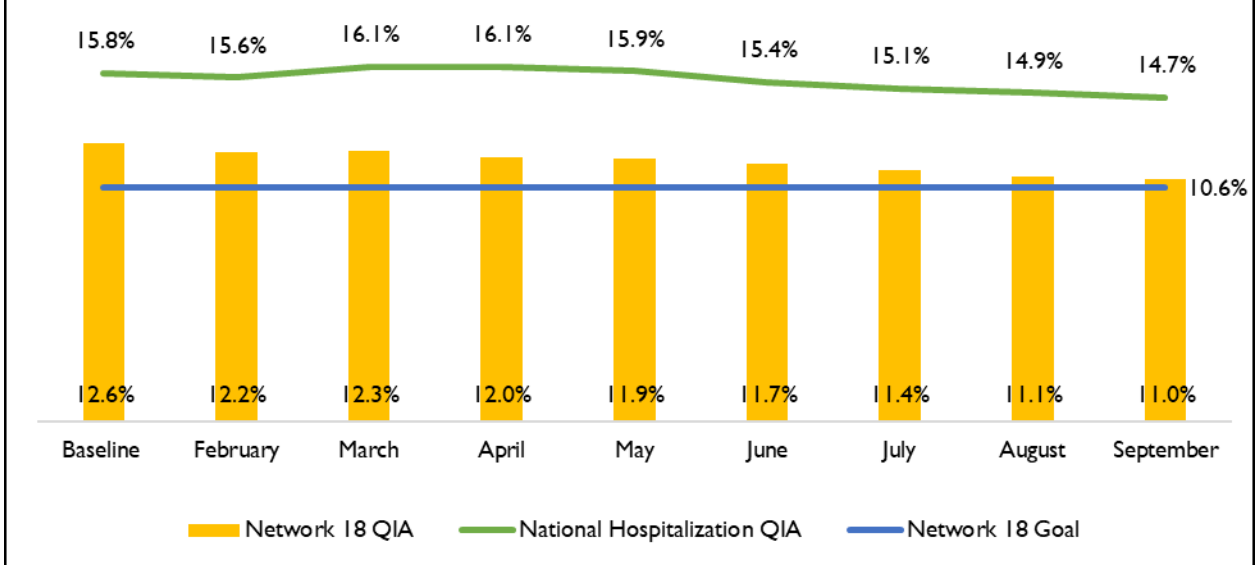
Network 18 created an “HBV Kit” to educate both staff and patients on the complicated Hepatitis B series. A tracking form was created with the help of the Patient Advisory Committee (PAC), for nurses to discuss with patients where they are in the series and how many more shots they can expect and when. A colorful “quick reference guide” was created to simplify guidelines so nurses can provide vaccinations per the recommendations.

Additional resources from HealthInsight, vaccine manufacturers, the CDC, and the Immunization Action Coalition were provided to participants for each vaccination type and targeted their patient education towards disparate groups found in their facility-specific data.

Network 18 collaborated with HSAG and CAIR to advocate for the onboarding of dialysis clinics into the California vaccination registry. Facilities conducted quarterly RCAs and PDSAs to identify and address barriers of their individual clinic. The Network reviewed each RCA and provided individualized support towards the facility’s success as needed. The CDC vaccination recommendations were taught during the first webinar to educate staff, followed by additional webinars, reports, flyers, and other resources over the year, to reinforce the initial education, account for staff turnover, and establish sustainable practices.

Facilities reviewed their unvaccinated population for population disparities as part of their initial RCAs, and formulated PDSAs to engage those patients, including a requirement to recruit a patient from the disparate population to help the QIA as an SME. Data issues were continually identified and corrected with technical assistance in CROWNWeb, including flyers, reports, and webinars. By focusing on system improvements, better reporting practices, coordination of care, and patient education, the vaccination levels in these facilities will remain high, with the Network ensuring effective processes are in place.

**Network 18: Hospitalization Rates for Quality Improvement Activity (QIA) Facilities with Pilot Project Comparison Rate
January 2017 - September 2017**



Source of data: October 2017 ESRD Network Dashboard

Hospitalization Reduction Quality Improvement Activity

Project Overview and Goals:

The goal of this project was for the participating Networks to achieve at least a two point reduction in the hospitalization rate based on a measure of hospitalizations per 100 persons during a base year baseline of second and third quarters by end of each option year.

Successes:

All facilities on the project successfully integrated with their primary hospitals' electronic medical records or with their county's Health Information Exchange (HIE).

Hospitalization rates were reduced by 2.82% in the project timeframe of January to July 2017. Project facilities were required to conduct post-hospitalization assessments on all hospitalized patients, which included medication review, evaluation of estimated dry weight (EDW), dietary or social needs, and education needs on treatment or disease process that contributed to the patient going to the hospital.

It was initially discovered that it sometimes took up to 72 hours for hospital staff to identify a patient as ESRD. Network 18 developed Patient Identification Cards and sent them to facilities to distribute to patients, to help quickly identify them as ESRD when brought to a hospital.

Network 18 assisted a major Southern-California hospital chain in evaluating their ER protocols for ESRD appropriate treatment, which initiated updates to several protocols to include a treatment plan specific to ESRD patients.

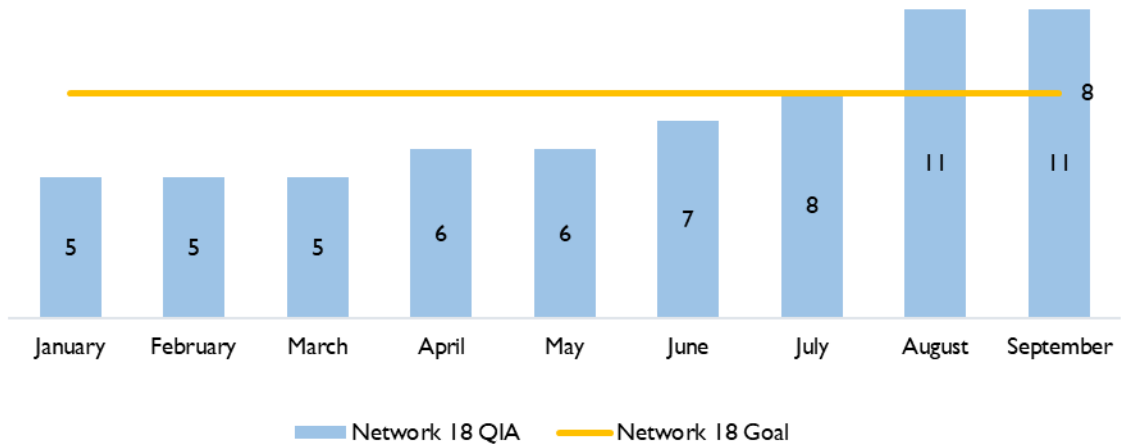
The major discharge diagnosis for hospitalizations at project facilities was identified to be gastrointestinal issues. The Network developed a "Healthy Gut Kit" that contained several components including sections on exercise, diet and medications. The diet section was then further broken up into separate sections for diabetic and non-diabetic patients, and made available in English and Spanish.

Barriers:

ESRD patients are medically complicated with several co-morbidities and an average of seven different medical providers. The current state of the health care system does not make available a provider-accessible electronic medical database that maintains an integrated medical record for the patient.

CROWNWeb does not contain a field for the hospital discharge diagnosis, or updates to co-morbidities – which are only obtained originally from the CMS 2728 Form and cannot be updated throughout the patient's treatment. Network 18 has requested for CMS to allow for these fields to be added to the hospitalization section of CROWNWeb.

**Network 18: Count of Quality Incentive Program (QIP) Quality Improvement Activity (QIA) Facilities That Successfully Completed Plan-Do-Study-Act (PDSA) Cycles and Met the Improvement Target for Three Consecutive Months
April 2016 - September 2017**



Source of data: October 2017 ESRD Network Dashboard

Quality Incentive Program (QIP) Quality Improvement Activity

Project Overview and Goals:

The Network shall perform quality improvement interventions with facilities at risk for payment penalties based on their recent ESRD QIP performance. The improvement target for each facility is at least 25% relative improvement from baseline or exceeding the ESRD QIP penalty threshold.

Successes:

Network 18 had 10 (rolling) project facilities working on both hypercalcemia and adequacy. All of the facilities made their 25% relative improvement goal.

It was discovered that the majority of the adequacy issues fell into two categories: peritoneal patients and patients with high fluid gains. Interventions were developed in both of the target groups.

One of the most impactful interventions was a Learning and Action call presented by a patient SME on the topic of facilities blaming of the patient for fluid overload.

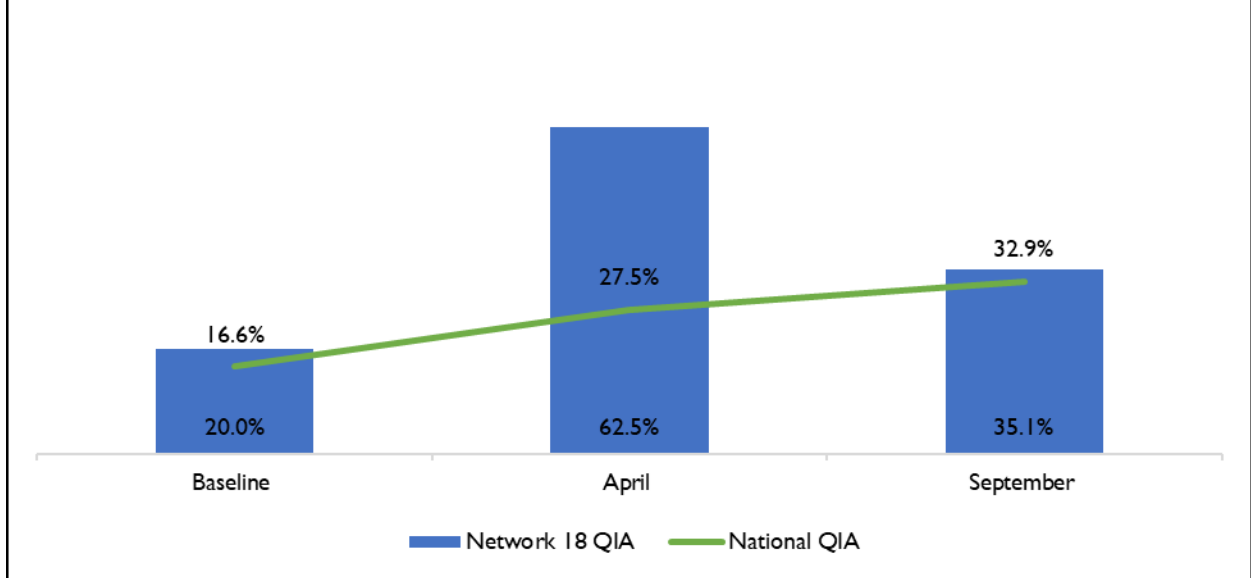
Barriers:

Some nephrologist and medical professionals questioned the validity of the Kt/V 1.7 goal for adequacy for peritoneal dialysis, suggesting that it is not an accurate measure.

Another identified barrier affecting not only this project but the entire QIP is that dialysis providers do not always have access to all relevant data.

This opinion was also voiced to the Network and at various conferences throughout the calendar year.

**Network 18: Bloodstream Infection Reporting Rates for National Healthcare Safety Network (NHSN) Data Quality Improvement Activity Facilities with National QIA Rate Comparison
September 2016 - September 2017**



Source of data: September 2017 NHSN (National Healthcare Safety Network)

NHSN Data Quality Improvement Activity

Project Overview and Goals:

Previous data quality evaluations performed by the Centers for Disease Control and Prevention (CDC), the ESRD Networks, and others have identified a substantial gap in bloodstream infection (BSI) reporting among dialysis facilities as compared to the hospitalization rates demonstrated among this population. Sepsis is a significant concern throughout both acute and chronic settings. The multi-pronged goal of this project is that increased surveillance of BSI data for ESRD patients transitioning between the hospital setting and individual clinics will improve infection control, communication with hospitals, accuracy of medical records, and increase timely clinical interventions infection.

Network 18 compared facility ranks on eight measures of mortality and morbidity taken from the 2015 Dialysis Facility Reports (DFR) and 2015-2016 National Healthcare Safety Network (NHSN) data in order to select candidate facilities for this project.

The Network selected the 20 lowest-scoring facilities on the combined measures for this project. These criteria demonstrated facilities that had high hospitalization and mortality rates due to infections, while at the same time reporting a disproportionately low BSI rate in NHSN. Many participants were reporting zero hospital-drawn positive blood cultures at the outset of the project.

Facilities attended monthly webinars in which they learned and discussed infection prevention best-practices shared by other facilities. Participants also completed facility-specific goal statements, used a Plan-Do-Study-Act (PDSA) cycle to create a quarterly action plan, and established electronic medical record (eMR) access to at least one local hospital or Health Information Exchange.

Successes:

Network 18 collaborated with the California Department of Health to utilize the state's HAI campaign. An RN visited each clinic throughout the year to help establish use of the CDC audit tools and worked one-on-one with staff in infection prevention.

Network 18 had 27 participants representing 3,666 patients at baseline, with a mean BSI rate of 0.72 blood stream infections per 100 patient months; 12 clinics established eMR access during the course of this project.

The focus on care coordination helped them increase their communication with the acute setting, as demonstrated by a significant increase in data accuracy, along with a 76% increase in the number of reported hospital-drawn positive blood cultures over baseline.

ESRD NETWORK **RECOMMENDATIONS**

Sanctions:

Network 18 did not refer any facilities for sanctions in 2017. All facilities in Network 18 participated with Network projects and strived to attain Network goals. The Network's Non-Compliance with Network Projects procedure was used as necessary and resulted in facility cooperation.

Recommendations:

Network 18 identified the need for nocturnal dialysis treatment options throughout the Network area, as very few programs exist.

The Network also identified that only a select few dialysis providers will accept higher acuity patients (patients with vents, tracheostomies, etc.). The request for placement of these patients is especially challenging because these few providers are only located in urban regions.

There is a need for more providers to be willing to accept these patients, or alternatives such as assisted peritoneal or home-hemodialysis, are needed to assist these patients.

ESRD NETWORK

SIGNIFICANT EMERGENCY

PREPAREDNESS

INTERVENTION

Network 18 monitors all interruptions in dialysis services that occur due to minor issues such as power outages, water issues, repairs, and other events that require a brief closure.

In 2017 Network 18 tracked 119 such closures. No Network assistance was required.

The Network also monitors events such as earthquakes, wild fires, extreme weather, and other potential disaster events that may impact the ability for dialysis facilities to safely provide access to care for their patients.

Outlined below are the larger scale events that impacted the Network 18 service area in 2017.

June:

Manzanita Fire: Riverside County. Impact: None.

Hill Fire: San Luis Obispo County. Impact: None.

Mart Fire: San Bernardino County. Impact: None.

July

Alamo Fire: San Luis Obispo County. Impact: None.

Whittier Fire: Los Angeles County. Impact: None.

September

Canyon Fire: Los Angeles County. Impact: None.

December

Creek Fire: Los Angeles County

Impact: One dialysis facility closed temporarily due to fire. All patients were redirected to alternate units. Several patients were affected and redirected to alternate units due to evacuations and road closures. All patients were accounted for and no additional assistance from the Network was needed.

San Bernardino University Fire: San Bernardino County

Impact: One dialysis facility was closed and all patients were redirected to an alternate unit for treatment. All patients were accounted for and no additional assistance from the Network was needed.

Thomas Fire: Ventura and Santa Barbara Counties

Impact: Two dialysis units were closed due to fire impact. The Network maintained daily contact with all units and Ventura County Emergency Management to provide updates on available chairs at non-impacted units. All patients were accounted for and affected units were able to get all patients treated.

Liberty Fire: Riverside County. Impact: None.

Lilia Fire: San Diego County. Impact: None.

Rye Fire: Los Angeles County. Impact: None.