

# 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

IPRO ESRD Network  
of New England  
ESRD Network I

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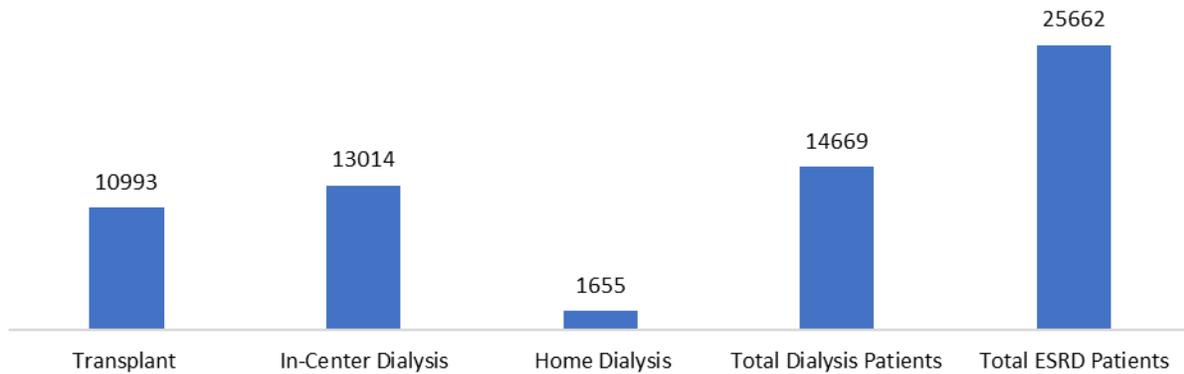
HHSM 500-2016-00019C  
June 1, 2018

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# ESRD DEMOGRAPHIC DATA

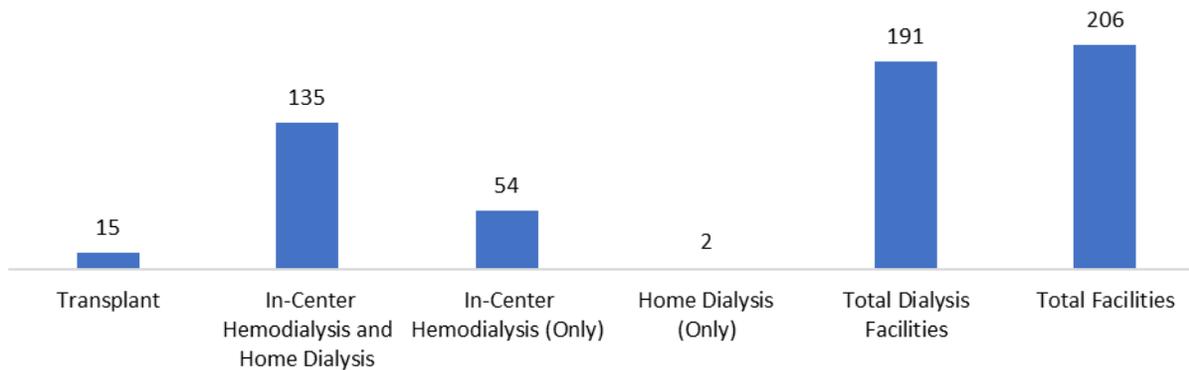
**Network 1: Prevalent ESRD Patients by Treatment Modality  
As of December 31, 2017**



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

Source of data: CROWNWeb

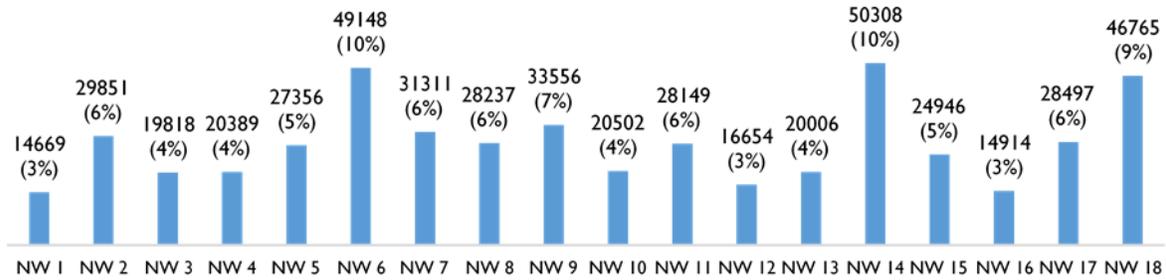
**Network 1: Count of ESRD Medicare-Certified Facilities by Modality Type  
Offered  
As of December 31, 2017**



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

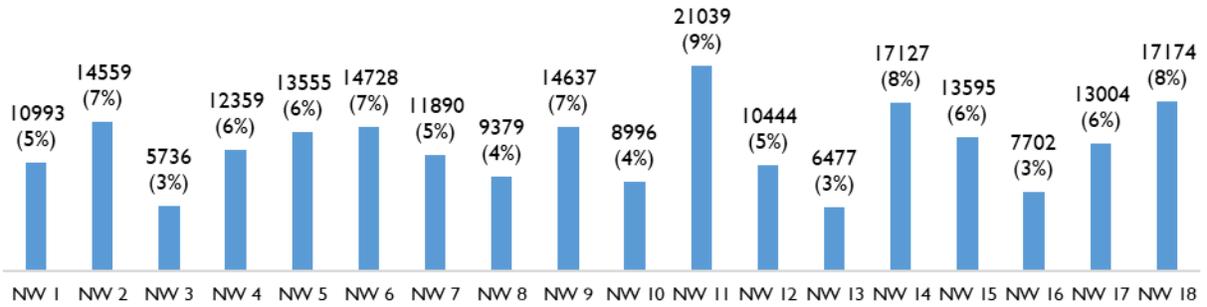
Source of data: CROWNWeb

**National: Count of Prevalent Dialysis Patients (Home and In-Center) by ESRD Network with Percent of Total  
As of December 31, 2017**



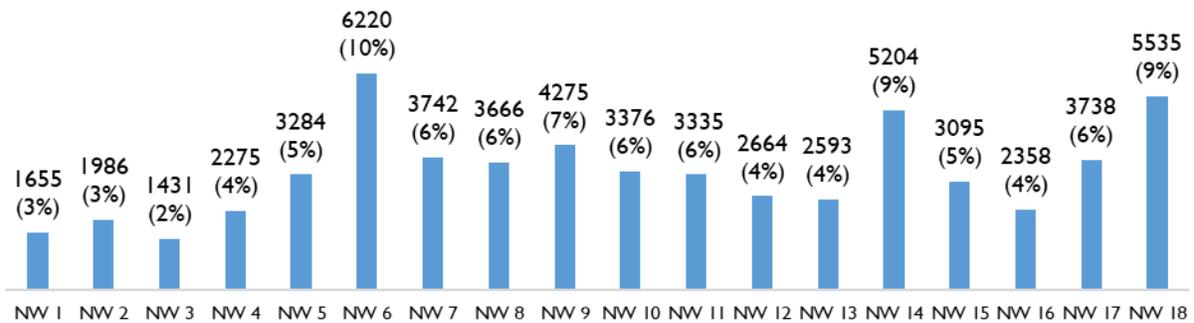
Source of data: CROWNWeb

**National: Count of Transplant Patients by ESRD Network with Percent of Total  
As of December 31, 2017**



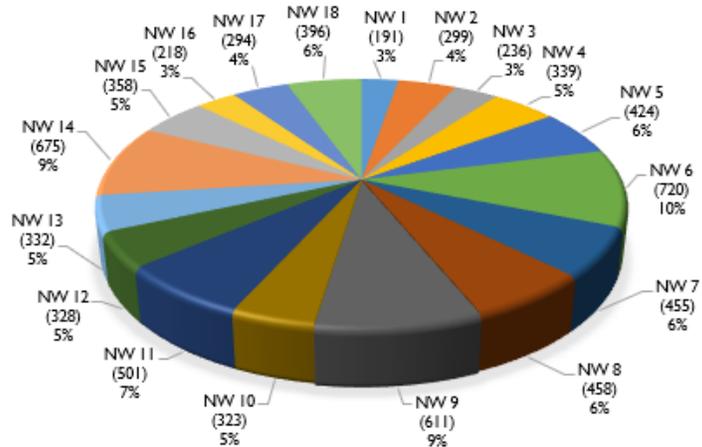
Source of data: CROWNWeb

**National: Count of Prevalent Home Hemodialysis and Peritoneal Dialysis Patients by Network with Percent of Total  
As of December 31, 2017**



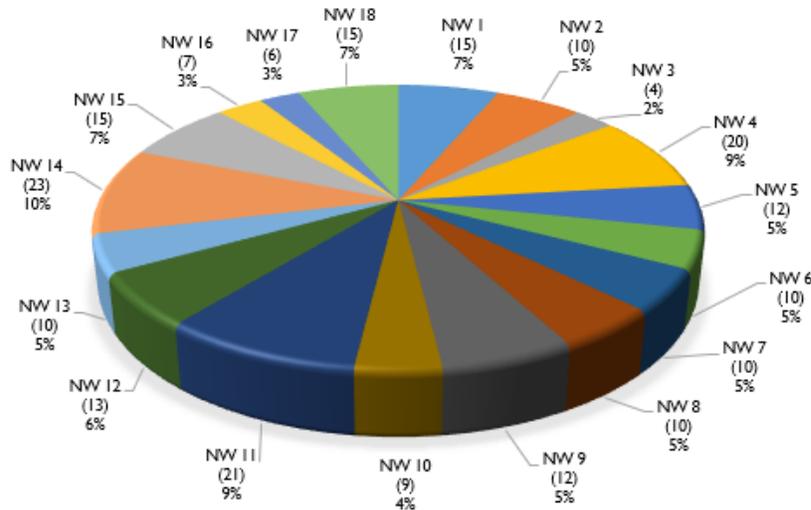
Source of data: CROWNWeb

**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**



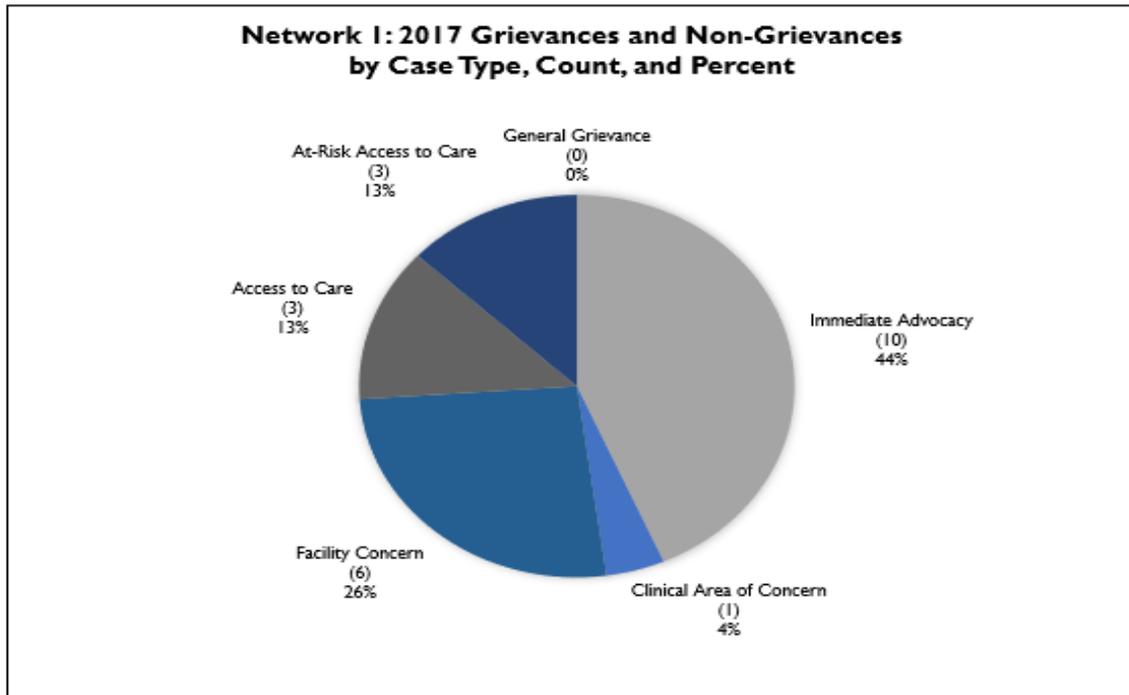
Source of data: CROWNWeb

**ESRD NETWORK**  
**GRIEVANCE AND ACCESS**  
**TO CARE DATA**

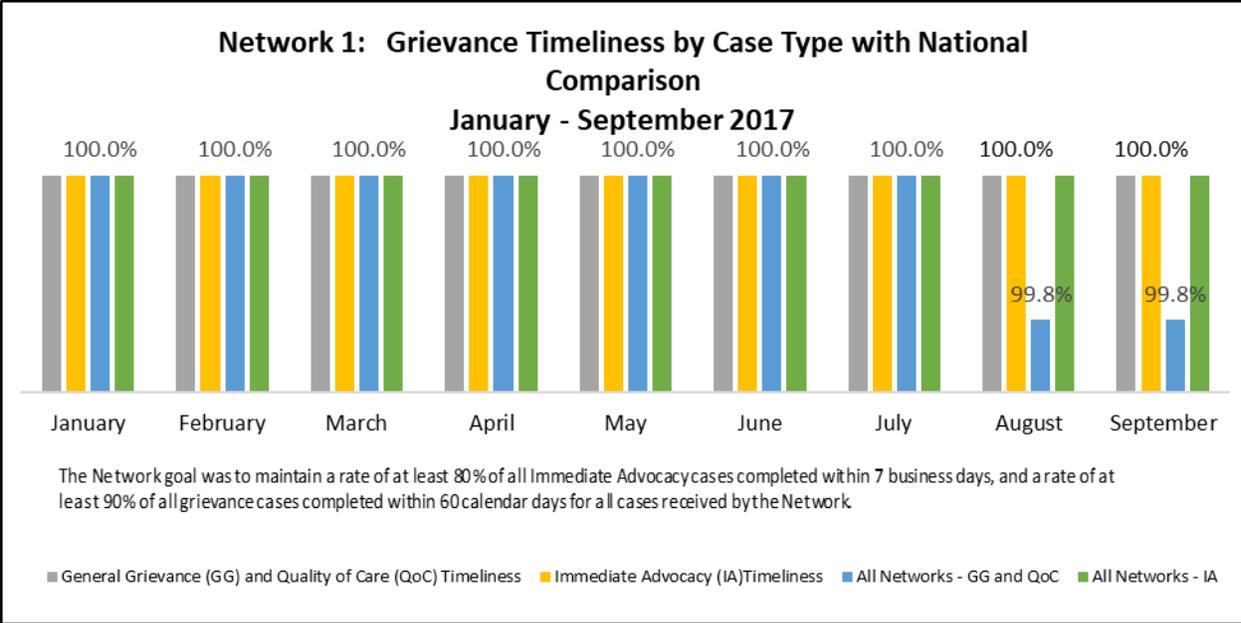
## Network I: Grievance Data for Calendar Year 2017

Category	Cases
<b>Grievance Cases</b>	<b>11</b>
General Grievance	0
Immediate Advocacy	10
Clinical Area of Concern	1
<b>Non-Grievance Cases</b>	<b>12</b>
Facility Concern	6
Access to Care: Confirmed Involuntary Transfer/Discharge (IVT/IVD)	3
At-Risk Access to Care	3
<b>Additional Case Information</b>	
Averted IVT/IVD	0
Failure to Place	0
<b>Total Cases 2017</b>	<b>23</b>

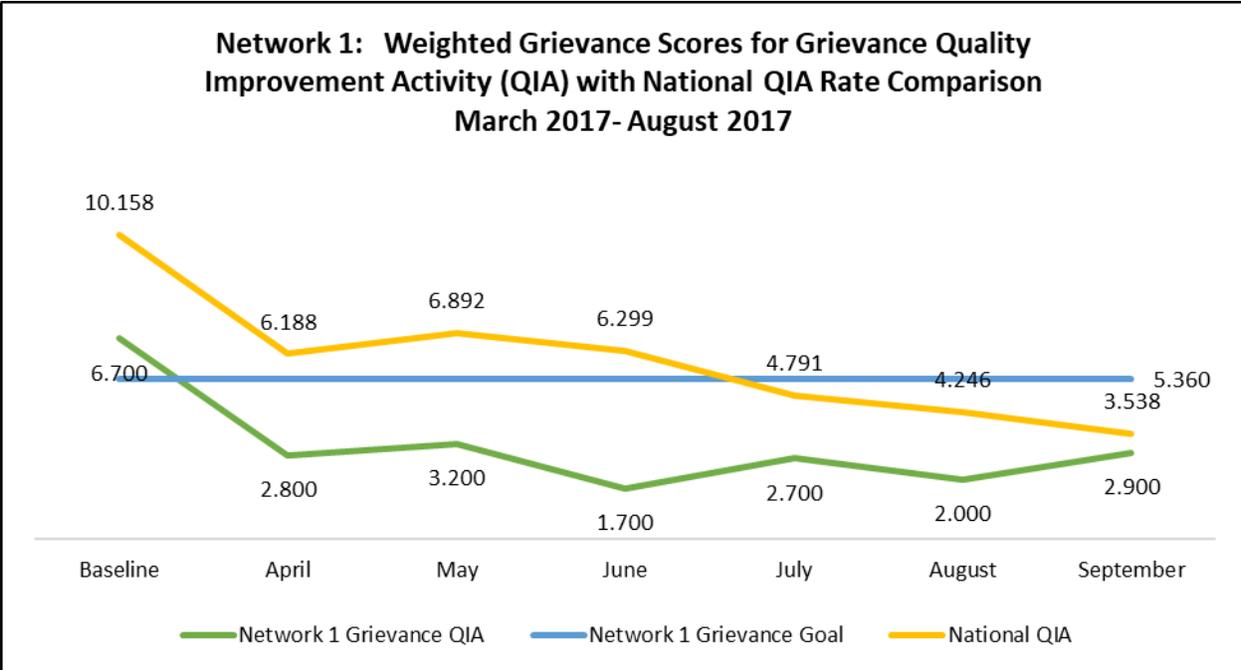
Source of data: Patient Contact Utility (PCU)



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 Activities

**Project Overview** An analysis of grievances and access to care issues occurring in the Network's service area during the first and third quarters of 2016 revealed that the most prevalent grievance issues were staff related and dealt with communication and professionalism, and the most prevalent access to care issues involved involuntary discharges as a result of violence. The focus of this quality improvement activity (QIA) was to educate staff and empower patients on ways to improve and eliminate minor grievances. The Network worked with 10 facilities in its service area that had the most grievances and access to care issues based on grievance data extracted from the Patient Contact Utility (PCU) for the months of April through October 2016. The PCU is a database for Network reporting of ESRD beneficiary complaints and grievances to CMS.

The primary goal of the 2017 grievance quality improvement activity was to achieve a 20% relative reduction in participating facilities' average grievance scores from baseline (March 2017) to re-measurement (September 2017), based on weighted (severity) scoring.

For the 10 participating facilities the baseline score (total coded scores of grievances from grievance logs) for monthly weighted averages was 6.70. The project goal was a 20% reduction (5.36). The Network was successful in reducing the grievances to a final score of 2.90, thereby improving performance by 56.72%.

**Interventions** The Network's approach to developing interventions to reduce grievances was based on the concepts behind the Picker Institute's Eight Principles of Patient-Centered Care (PCC): All patients deserve high-quality healthcare, and patients' views and experiences are integral to improvement efforts. Interventions were designed to strengthen relationships and increase communication between patients and staff, with an understanding that achievement of these goals is a prerequisite to creating a culture of quality improvement.

The Network worked with facility staff to establish formal grievance processes and improve experience of care using the PCC approach. Interventions focused on the theme "ACT Now." Patient Subject Matter Experts (SMEs) helped to guide the development of the QIA's educational tools and resources, which included:

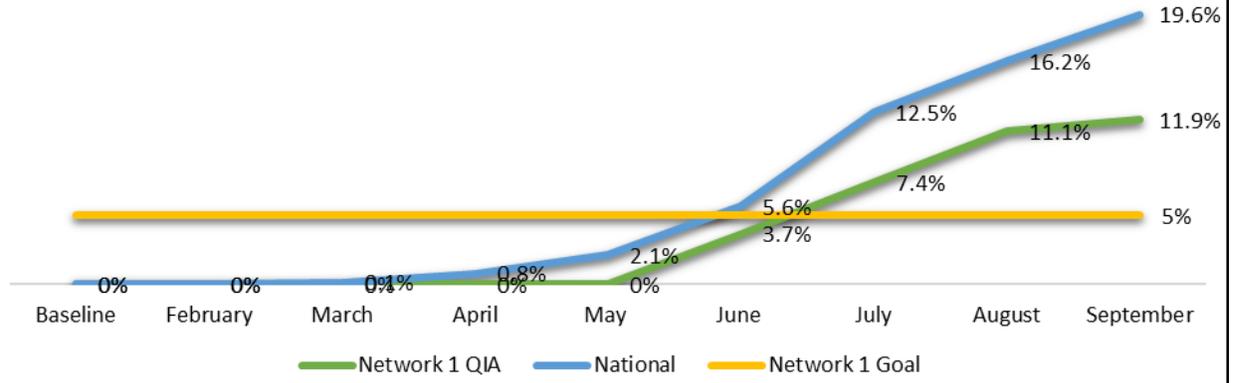
- Educational posters for patients about environmental concerns (i.e., being cold during dialysis); and promoting active communication about grievances;
- Provider posters promoting positive interaction between patients and staff; and
- Pocket-size checklist cards for staff members and for patients.

**Best practices spread to achieve goals** Using a PCC approach, during facility staff/patient meetings facility staff members asked questions to encourage proactive communication with the goal of addressing patient concerns at the time they are occurring.

- The Network created opportunities for providers to utilize the *ACT Now* sessions to check on patients' environmental, interpersonal, and operational concerns and/or needs before they became bigger issues.
- Facility leadership aided in changing organizational culture from reactive to proactive
- Facilities used training materials to provide in-services about professionalism, successful communication techniques, and patient-center care to staff.
- Facilities were provided the Dialysis Patient Grievance Toolkit created by the Kidney Patient Advisory Council of the Forum of ESRD Networks, which includes resources to support patients' understanding of how and when to escalate issues to a grievance.

**ESRD NETWORK QUALITY**  
**IMPROVEMENT ACTIVITY**  
**DATA**

**Network 1: Percent of Patients in In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) Quality Improvement Activity (QIA)**  
**Facilities that Indicated a Positive Change Related to the ICH CAHPS Selected Question**  
**Septembe**



Source of data: October 2017 ESRD Network Dashboard. Option 2 in in the draft annual report for Network 1, 4, and 9.

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

## Improving Patients' Scores on the In-Center Hemodialysis Survey – Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS®)

**Project Overview** Chronic out-patient dialysis facilities that treat more than 30 eligible patients during the prior calendar year are required by CMS to participate in the In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) survey, designed to measure the experiences of individuals' receiving in-center dialysis. The Network reviewed the results of the spring ICH CAHPS survey and selected for participation in this quality improvement activity the 20 facilities in its service area that performed poorest on questions 10-18 in the "Quality of Dialysis Center Care and Operations" composite measure.

The goals of this QIA were to achieve a 5% relative improvement in the number of patients who establish and work toward a personal goal from baseline period (March 1 – 31, 2017) to the re-measurement period (September 1 – 30, 2017), within the selected facilities.

The Network succeeded in achieving the goals of the QIA: The Network achieved a 11.92% relative improvement in the number of patients who established and worked toward attaining a personal goal, as part of their care plan, from baseline (0 of 1,250 patients) to re-measurement (164 of 1,376 patients).

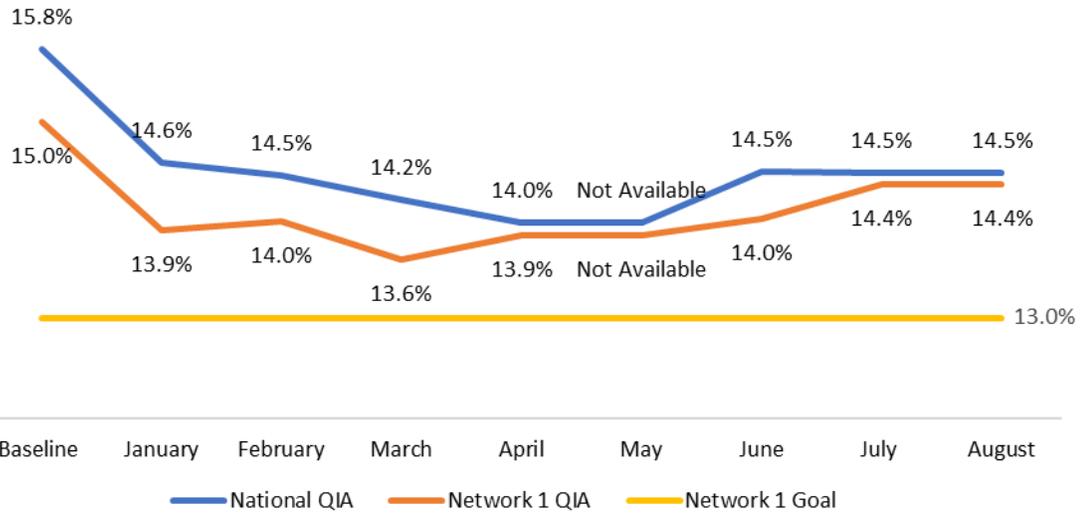
**Interventions** The Network created a program in which dialysis facility staff members worked with patients to set personal goals that were then incorporated in the patient's plan of care. The **Your Life. Take Charge!** campaign was guided by patient SMEs to promote adoption of patient self- management and goal setting processes. Educational tools and resources were provided to facility staff to promote the importance of involving patients in their care and to encourage them to help their patients establish and work toward achieving personal goals, thereby improving their dialysis experience. The Network supported facility staff in implementing campaign materials that included:

- A staff-facing **poster promoting** opening of lines of communication between staff and patients.
- **SMART goals** (specific, measurable, achievable, realistic, time-bound) resources for patients.
- **Motivational Interviewing** tools and techniques to educate staff on eliciting/evoking change, exploring importance and confidence, reflective listening, and supporting self-efficacy.
- A **Roadmap** designed to help patients understand how to set SMART goals and strengthen communication with facility staff.
- A **patient participation-tracking tool** to assist staff with tracking patients' success in achieving their goals.

### Best practices spread to achieve goals

- Facilities establishing a process/ procedure for including patient-centered goals in care plans;
- Facilities incorporating Network provided tools and resources about SMART goal into their processes; and
- Use of educational tools to help improve patient-provider relationships.
- Patient education highlighting the importance of participating in the ICH CAHPS survey

**Network 1: Long -Term Catheter (LTC) Rates for Quality Improvement Activity (QIA) Facilities with National QIA Rate Comparison  
January 2017 - August 2017**



Source of data: CROWNWeb

## Vascular Access: Reducing Long-Term Catheter (LTC) Use

**Project Overview** Research shows that patient morbidity and mortality rates are related to the type of vascular access used for dialysis with a higher infection rate associated with use of LTC compared to fistula use among eligible adult ( $\geq 18$  years of age) in-center hemodialysis patients (Foley & Lok, 2013). Patients with LTCs are defined as those with catheters in use (for dialysis treatments) for 90 days or longer. The Network worked with 87 facilities that had a LTC rate greater than 10% in their prevalent patient population (884 patients).

The project goal was to work with the targeted facilities in an effort to reduce the LTC in use rate in prevalent patients by two percentage points. The project baseline (15.02%) was derived from September 2016 ESRD NCC FFCL data; the project included an intervention period of nine months (January-September 2017) and a re-measurement during the month of September 2017. The Network attained a 0.60 percentage point reduction in LTC use, but did not meet the goal of the QIA.

**Interventions** Network strategies included:

- Identification of a lead facility contact to assist in identifying opportunities for education
- Identification of regional operations managers and quality improvement personnel for each targeted facility to ensure engagement in this QIA and the QIA aimed at reducing bloodstream infections
- Collaboration with regional managers, medical directors and facility leadership in identified geographical 'hot spots' of significant LTC usage to develop individualized focused interventions to overcome barriers to catheter removal
- Distribution of a template for analysis of root cause to assist staff in identifying and eliminating barriers to catheter removal, and monthly submission by targeted facilities of a Catheter Reduction Tool and Vascular Access Monthly Worksheet
- Sharing of educational materials, resources and best practices from access management specialists within the Network community

**Barriers to achieving goals**

- Patients had multiple failed attempts at having an access placed and refused to try again
- Patients missing multiple appointments with the vascular access surgeon
- Patients who are not healthy enough or have the vasculature to support an internal access
- Taking greater than 90 days to have an access placed, mature, and be cannulated
- New start patients with LTCs greater than 90 days
- Options other than LTCs are not available to some patients

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

Prior to the patient being admitted to the dialysis facility:

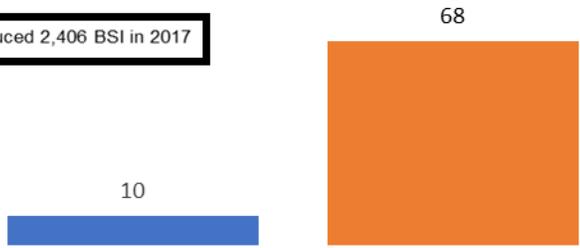
- Establishing direct communication between the patient's nephrologist and surgeon
- Providing patient education about ESRD prior to ESRD diagnosis
- Beginning permanent access education when the initial catheter is placed

On admission to the facility:

- Discussing access placement with the patient on day of admission
- Appointing a vascular access coordinator
- Providing staff and patients with continuous education on access maintenance
- Use of a monthly "Vascular Access Placement - Patient Tracking Tool."

### Network 1: Bloodstream Infections (BSI) and Quality Improvement Activity (QIA) by ESRD Network

Nationally, the Networks reduced 2,406 BSI in 2017



The Network goal was to decrease the rate of blood-stream infections (BSI) by a 5% or greater relative reduction in the pooled semi-annual mean in facilities participating in the quality improvement activity.

■ BSI Required for Reduction to meet Goal    ■ Actual BSI Prevented

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

## Reduce Rates of Dialysis Events: Healthcare Associated Infections; Bloodstream Infections/Sepsis

**Project Overview** According to the 2017 Dialysis Facility Report, from 2012 – 2015, 11.6% of dialysis patients in the Network’s service area, from were hospitalized due to bloodstream infections (BSIs), compared to the national average of 10.9%. In the same report, the mortality rate due to infections was 16.5% in the New England states, compared to the national average of 11.7%. The focus of the QIA was to increase awareness and reporting of BSIs in at least 20% of the facilities in the Network’s service area, while decreasing rates of dialysis events, specifically bloodstream infections. The baseline data was taken from NHSN BSI data for the first and second quarters of 2016. The QIA incorporated a six month intervention period (January -June 2017), and a re-measure period to include the first and second quarters of 2017. The goal for this project was to achieve a five percent (5%) relative reduction in the pooled mean BSI rate (calculated by adding the mean, multiplied by the sample size for each sample, and dividing the number by the sum of the sample sizes) for the targeted facilities’ re-measure period of January – June 2017.

Based on an analysis of NHSN BSI data from the first and second quarters of 2016, the Network selected 41 facilities with infection rates ranging from 0.81 to 3.11 per 100 patient months and with between 1 and 17 BSIs in the first and second quarters of 2016. The Network’s interventions succeeded in decreasing the pooled mean BSI rate (from 1.28% at baseline to 0.82% at re-measurement); yielding a 36.94% relative reduction.

**Interventions** Prior to designing QIA interventions, the Network worked with targeted facilities to complete a root cause analysis (RCA) “autopsy” (using the 5-Whys RCA Tool) for each infection identified during the baseline period. The information gained through these analyses determined the focus of interventions based on cause categories, and determined the selection of appropriate Centers for Disease Control and Prevention (CDC) Core Interventions. The Network promoted the exchange of knowledge, CDC educational resources, and best practices through the HAI Learning and Action Network (LAN). In addition the Network worked with each facility to establish and engage lead facility contacts and invited patient SMEs to share their stories during educational events. The Network worked with targeted facilities to implement a facility summary report that documented successes, challenges, and any key observations discussed during monthly Quality Assessment Performance Improvement (QAPI) meetings. These reports were submitted to the Network on a monthly basis. In addition, QAPI and corporate leadership teams of high-risk facilities (those facilities participating in both the LTC Reduction QIA and the HAI-BSI QIA) received a focused, concentrated level of support to ensure that the goals of both QIAs were met.

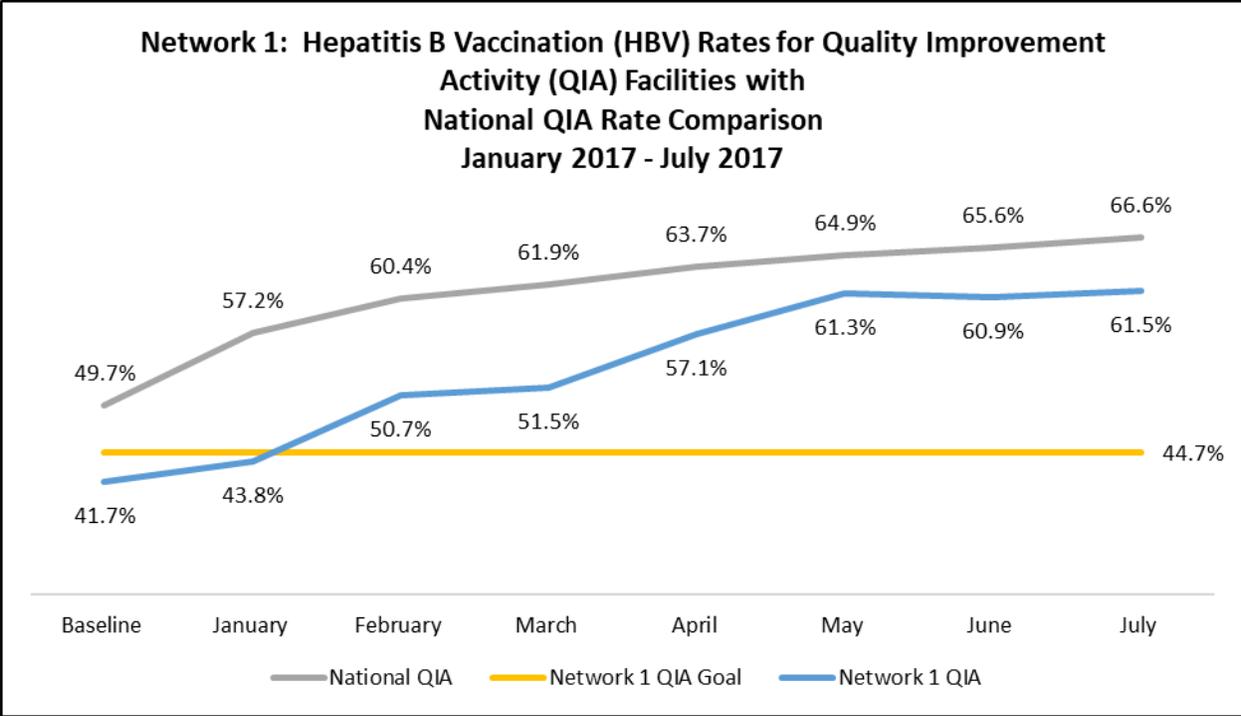
The Network provided feedback about BSI rates to targeted facilities periodically throughout the QIA, and facilities were asked to post results in a spot accessible to staff members.

**Barriers to achieving goals** Target facilities reported the following barriers:

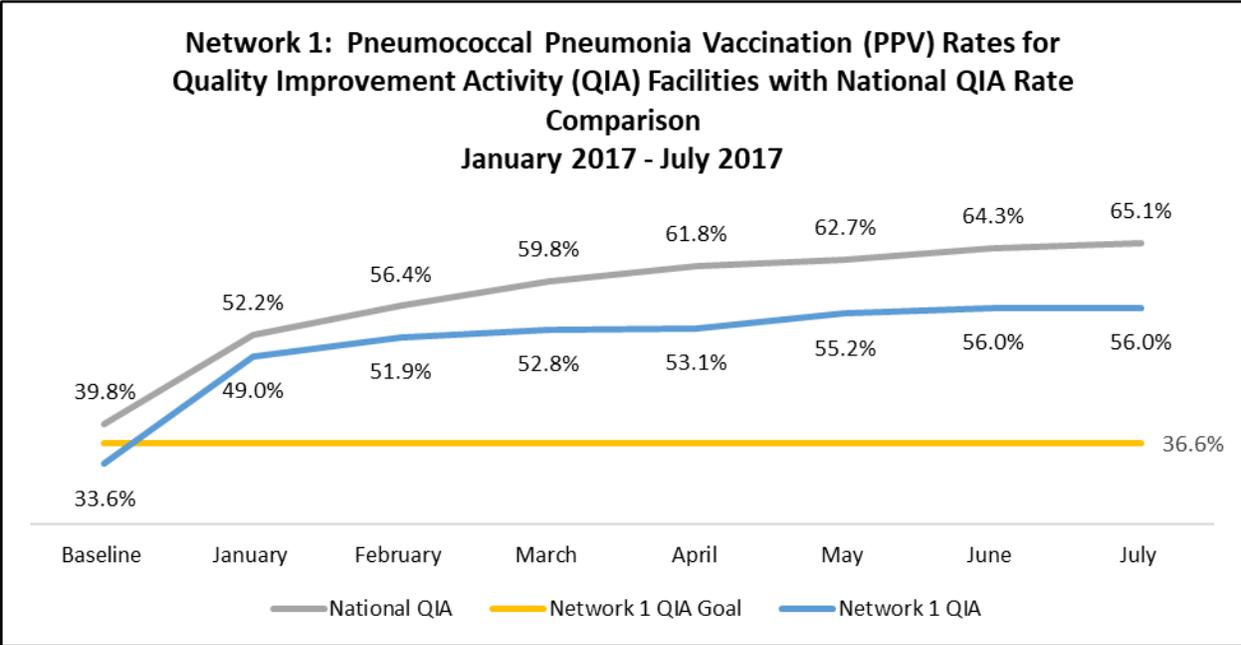
- Too many monthly audits
- Inconsistent dialysis event reporting in NHSN

**Best practices spread to achieve goals**

- Monthly staff education on infection prevention utilizing the CDC audit tools
- Quarterly LAN meetings to share best practices and address identified causes
- Incorporating patients in the CDC hand hygiene audits
- Discussing infection prevention with patients



Source of data: CROWNWeb



Source of data: CROWNWeb

## Increase Hepatitis B and Pneumococcal Pneumonia Vaccination Rates

**Project Overview** Dialysis patients are at greater risk than the general population for complications related to hepatitis B and pneumonia; yet the percentage of dialysis patients who receive these vaccines remains low. Data from the ESRD NCC revealed that the rates for the pneumococcal and hepatitis B vaccines in the Network's service area for September 2016 were 33.63% and 41.71% respectively.

The Healthcare-Associated Infection (HAI) – Vaccination QIA included a facility-specific goal (to increase both pneumococcal pneumonia and hepatitis B vaccination rates at the facility level to greater than 60%) and a Network goal (to improve rates for both vaccines by 3 percentage points from baseline (September 2016) to re-measurement (February through September 2017)). The Network worked with 25 facilities in its service area that were in the lowest quintile for both vaccines.

The Network's interventions succeeded in increasing hepatitis B vaccination rates in target facilities from 41.71% at baseline to 62.13% at re-measurement, demonstrating a 20.42 percentage point increase (48.96% improvement); and in increasing PPV vaccination rates in target facilities from 33.63% at baseline to 56.30% at re-measurement; a 22.67 percentage point increase (67.41% improvement).

**Interventions** The Network conducted a community-based root cause analysis (RCA), working closely with patient SMEs and Patient Advisory Committee (PAC) members to identify obstacles in obtaining or recording vaccination rates. The results of this RCA, as well as RCAs conducted at each of the 25 target facilities, helped the Network develop interventions to address the barriers to patients receiving vaccinations and the unique issues within the target facilities.

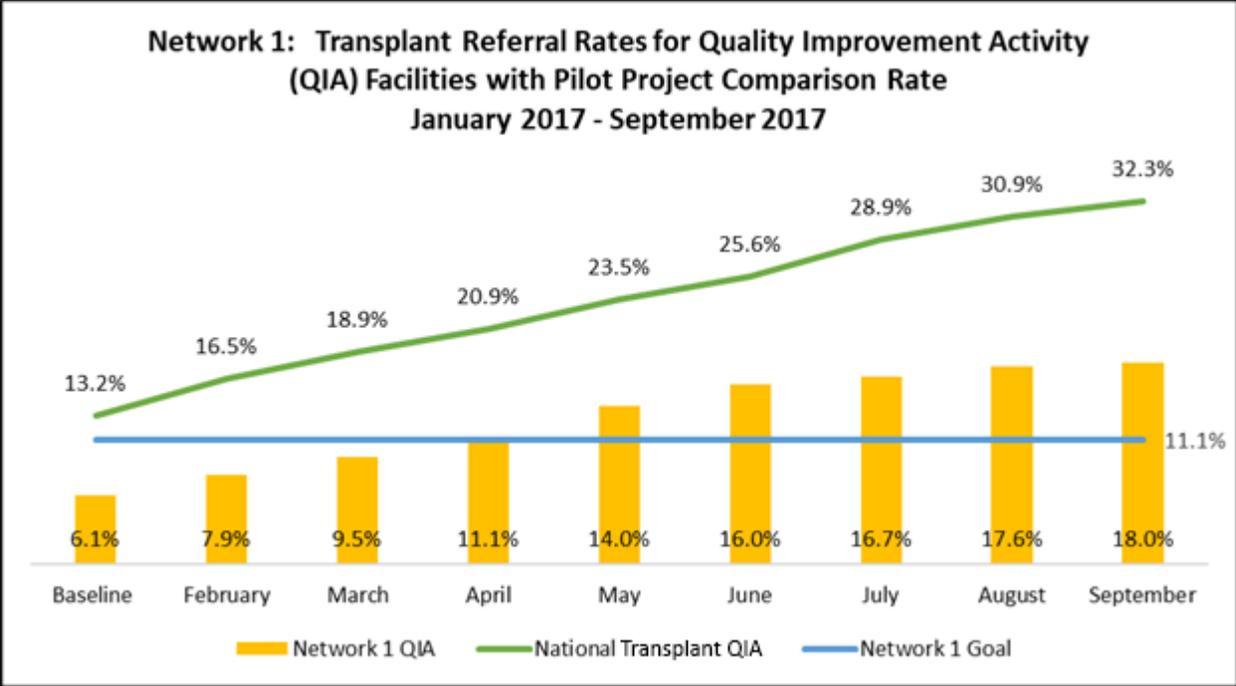
One of the main categories of barriers to patients receiving the needed vaccinations was patient refusal/lack of understanding/cultural mistrust. To address these barriers, the Network developed educational materials based on patients' reasons for refusal and included information on vaccinations in the peer mentorship program, in which patients of similar cultures shared experiences with peers. The Network identified staff and patient educational resources available from the Centers for Disease Control and Prevention (CDC) "*Assessment, Feedback, Incentives, Exchange (AFIX) program to reduce missed opportunities to vaccinate and improve immunization delivery practices at the provider level.*"

**Barriers to achieving goals** The following barriers were reported by facilities:

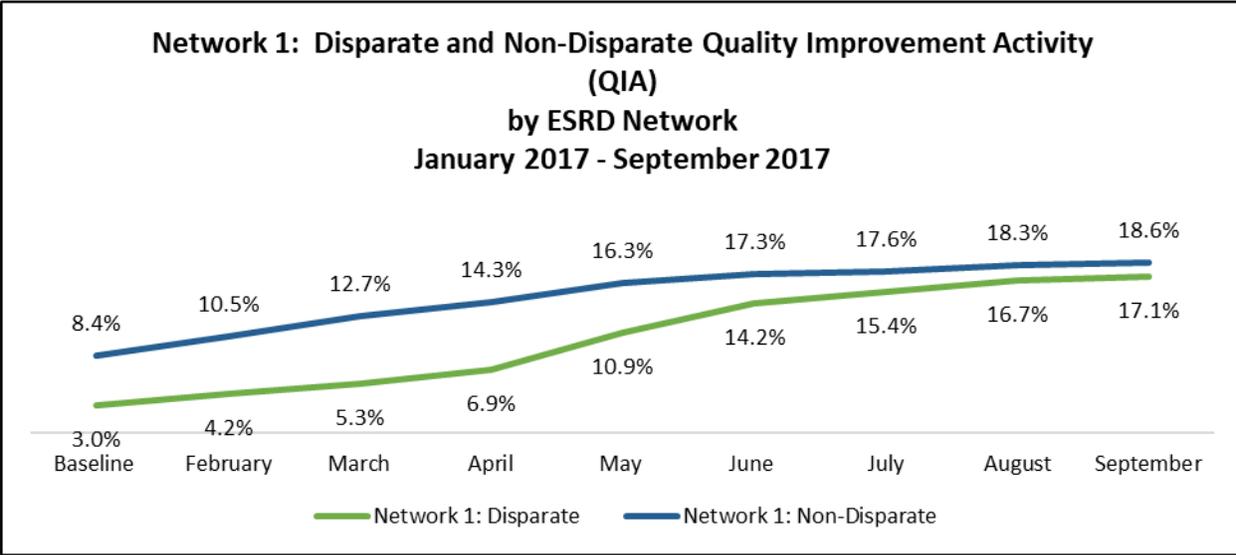
- Data entry errors
- Patient choice
- Frequency with which facilities offer vaccinations

**Best practices spread to achieve goals**

- Reconciling facility level data with national data
- Reviewing patient level data at the facility level
- Patient education to debunk myths about vaccinations
- Increased availability of vaccinations at the facility level



Source of data: October 2017 ESRD Network Dashboard



Source of data: October 2017 ESRD Network Dashboard

\*Disparate population is female and non-disparate population is male.

## Population Health Focused Pilot Project (PHFPP): Improve Transplant Coordination

**Project Overview** While several options for renal replacement therapy, such as dialysis, offer life-sustaining treatment transplantation offers the opportunity for better clinical outcomes, including reduced mortality and morbidity, improved patient quality of life, lower costs and improved survival (Meier-Kriesche, Ojo, Port, Arndorfer, Cibrik, D. M., & Kaplan, 2010; Wolfe, et al., 1999). An evaluation of transplant waitlist data in Dialysis Facility Reports revealed that of the 8,565 patients in the Network's service area, only 2,600 patients, or 30.3% of the patient population, were on the transplant waitlist.

The goal of QIA was to increase the rate of patient transplant referrals by 5 percentage points and to decrease the identified disparity gap (females vs. males) by one percentage point in the targeted facilities from the baseline period (April to September 2016) to the re-measurement period (monthly measurements, January to September 2017). Seven facilities were identified for inclusion in the project (with a total combined census of 700 patients). Selected facilities had a self-reported rate of less than 30% of patients on a waitlist and a 5% or greater disparity rate.

The transplant referral rate for the baseline period (April through September 2016) in the targeted facilities was 6.08%. The transplant referral rate for the re-measurement period (January through September 2017) was 17.95%; representing an 11.87 percentage point increase (190.45% improvement). The gender disparity gap for the baseline period in the targeted facilities was 5.44%. The Network's interventions resulted in a 3.98 percentage point reduction (73.15% improvement), to a 1.46% disparity gap at re-measurement.

**Interventions** The Network structured interventions to ensure that providers understood the UNOS allocation system criteria, as well as techniques for talking to patients about transplant as an option. Interventions aimed at facility staff focused on ensuring staff members have a clear definition of what constitutes a referral; establishing a streamlined process for referral reporting; providing education related to the transplant referral process, evaluation criteria and the living donor program; completion of root cause analysis to identify and correct deficiencies in the transplant referral process; collaborations with transplant centers to maximize patient education and follow up; and incorporating Network PAC Representatives and patient SMEs to initiate conversations about transplant.

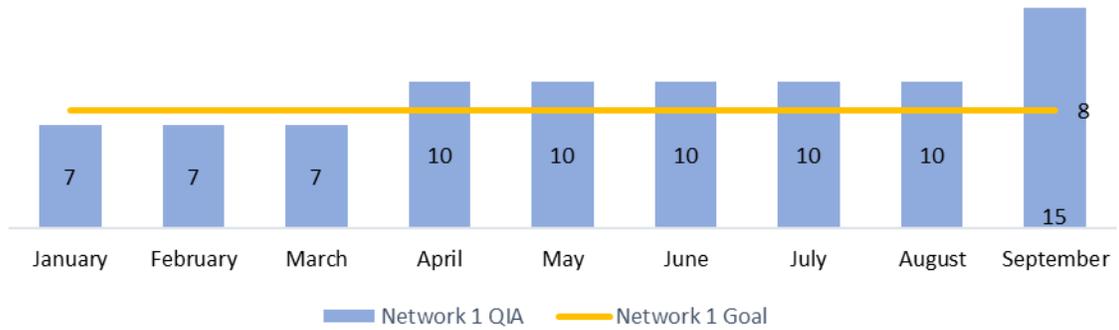
Patient-facing interventions featured a resource toolkit created with guidance from patient SMEs; Education Stations, to provide a dedicated space for transplant education resources at each targeted facility; facility-level peer mentors, serving as Transplant Navigators; and a transplant referral guide.

Targeted facilities tracked progress toward meeting goals using a Plan-Do-Study-Act (PDSA) tool. An advisory committee assisted in project planning, material development, and sharing resources with the ESRD community; identifying gaps in the referral process; and in identifying communication gaps between physicians and the transplant coordination team.

### Best practices spread to achieve goals

- Identification of a transplant lead (and backup) coordinator at each facility to identify opportunities for patient education and document referrals
- Monthly calls between dialysis facilities and local transplant centers to track status of patients' progress through the transplant journey
- A resource toolkit to support patient and staff education on the transplant process
- Dialysis facility hosting lobby day for transplant centers to talk with patients
- Establishing one location to house all transplant referrals and tracking of communication between dialysis and transplant centers

**Network 1: 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

## ESRD Quality Incentive Program (QIP) Quality Improvement Activity (QIA) Hypercalcemia

**Project Overview** The ESRD Quality Incentive Program (QIP) is designed to alter payment based on the quality of care received at outpatient dialysis facilities. Those facilities that do not meet or exceed certain performance standards can receive up to a two percent payment reduction for all services provided during the applicable payment year (CMS.gov, 2015). One of the measures reports the number of adult patients served by the facility who had hypercalcemia during the measurement period. Facilities participating in this QIA were outpatient ESRD facilities in the Network's service area that lost points on the hypercalcemia measure for the QIP performance year 2015 (payment year 2017), or facilities that showed a continued trend of increased hypercalcemia during the baseline period (November 2015 through October 2016). The Network identified 10 facilities as having a sustained and ongoing problem with calcium control for participation in the QIA.

The QIA was based on a baseline period of November 2015-October 2016 and an intervention period that concluded in October 2017. Network goals included a 25% relative improvement from baseline to re-measurement in the rate of hypercalcemia in participating facilities, or the QIP threshold being exceeded for three (3) consecutive months or more, and a minimum of eight (8) facilities completing the PDSA cycle by October 2017. Ten of the participating facilities successfully met the requirements of the QIA by October 2017, thereby "graduating."

**Interventions** Facilities were provided a root cause analysis template and were encouraged to review hypercalcemia rates with the facility's interdisciplinary team during QAPI meetings. The Network also supported facilities in implementing PDSA activities. Interventions included technical assistance and staff education through individual discussions and distribution of educational materials. Patients in targeted facilities were given educational materials and brochures from known sources. Calcium management tools were distributed to both staff and patients. Network staff followed up with facility leads throughout the project to identify key barriers to improving hypercalcemia rates.

### Barriers to achieving goals

- Limitations at the facility level to change protocols set by corporate offices (Large Dialysis Organizations [LDOs])
- Co-morbidities that exist in the ESRD population which make improvement in some patients challenging, would require individual patient monitoring and implementation
- Data are not currently required in the CROWNWeb system and no report exists to easily extract these data in a timely way to monitor progress

### Best practices spread to achieve goals

- Providing patients with education about the importance of following diet and medication recommendations, including how these impact health
- Discussing with corporations any facilities that may need exception criteria or assistance with protocol development; working with independent facilities to establish a clear protocol for mineral metabolism management to ensure progress toward goal
- Helping facilities identify individual patient challenges to inform development of individual patient education
- Assisting facilities with proper reporting in the CROWNWeb system to allow for progress tracking and evaluation of effectiveness of project interventions

**Network 1: 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)

## Improving NHSN Data Quality

**Project Overview** The Network conducted this QIA in response to the Centers for Disease Control and Prevention's (CDC) identification of a substantial gap in bloodstream infection (BSI) reporting by dialysis facilities and hospitals. BSIs can lead to serious complications and death in the dialysis population. The lack of accurately reported blood cultures can increase the severity of BSIs and prolong the treatment requirements for each patient.

The Network identified 20 facilities in its service area for Cohort I of this QIA based on identification of facilities that had a low number of reported positive blood cultures from the hospital setting and lacked access to hospital electronic medical records or were known to have challenges retrieving hospital medical records information for their patients. The Network also worked with five hospitals to which three or more of the identified dialysis facilities referred patients.

The goals of this quality improvement activity were to demonstrate that each facility adopt strategies that ensured capture of information about positive blood cultures identified in hospitals; improved dialysis facility reporting rates of BSIs identified in hospitals; and increase reporting of BSIs in the NHSN database.

Success was measured by an increase from the baseline period to the re-measurement period in the number of BSIs reported in NHSN on the day of a dialysis patient's hospital or emergency department admission, or the day after admission. The baseline period was January through June 2016, and the re-measurement period was January through June 2017. The Network was successful in increasing the number of BSIs reported from baseline (0.0%) to re-measurement (25.8%), representing a 25.8 percentage point improvement.

**Interventions** The Network implemented interventions to improve communication among hospitals and dialysis facilities using root cause analysis, (RCA) and the PDSA methods to address the causes of poor communication between the two settings that prevented facilities from receiving and entering this information into NHSN. Identified barriers included lack of awareness by hospital staff of the dialysis facility requirement; reluctance by hospital staff to report positive blood culture data to the dialysis facility due to perceived HIPAA violations; lack of consistency by hospitals in providing reports to dialysis facilities; facility staff not requesting the correct data (asking only for discharge summary); and facilities not assigning accountability to specific staff members for following up on hospitalizations.

Network staff met with hospital infection preventionists to share the goals, strategies and interventions of the QIA, and to identify the information they would need from dialysis facilities to improve communications. The Network brokered discussions among the hospitals and the dialysis facilities referring patients to them; ensured that contact information was exchanged; and provided hospital staff with CDC educational materials. Trainings were conducted about the proper reporting of dialysis events in NHSN.

**Barriers to achieving goals** Hospitals were reluctant to participate in the project; their reporting requirements were not aligned with ESRD objectives to share infection events across healthcare settings. In the absence of an HIE, sustainability of information transfer is compromised due to turnover of infection preventionists at hospitals and staff at dialysis facilities.

**Best practices spread to achieve goals** Identifying a contact person at the hospital proved to be the most effective strategy for facility staff to receive information about BSIs on an ongoing basis.

## 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 2017.

## Recommendations for Sanctions

No recommendations were made to CMS for additional services or facilities in the Network service area during 2017.

## Recommendations to CMS for Additional Services or Facilities

In 2017, the Network made no recommendations to CMS for additional services or facilities.