# 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

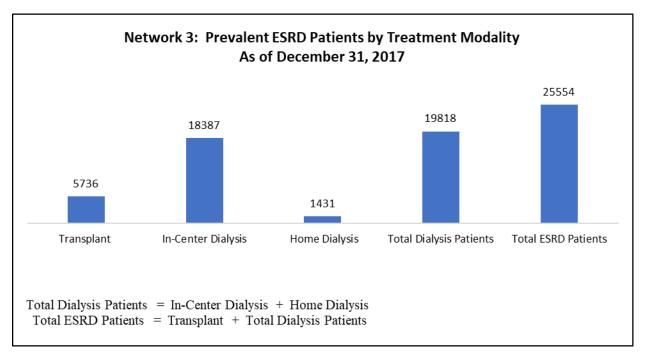
ESRD Network 3

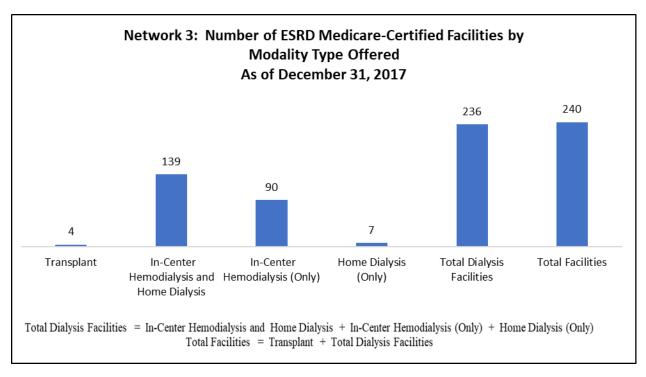


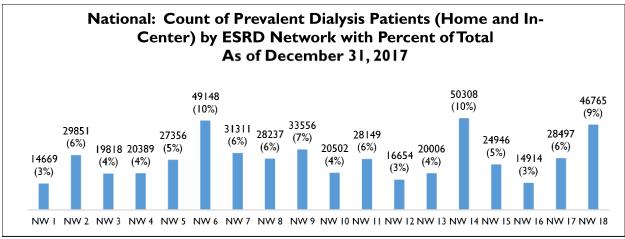
### **Table of Contents**

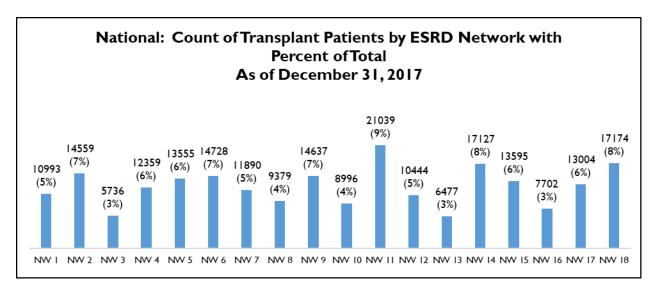
ESRD Network Grievance and Access to Care Data	6
Grievance Quality Improvement Activity	9
ESRD Network Quality Improvement Projects	10
In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems Quality Improvement Activity	12
Long Term Catheter Quality Improvement Activity	14
Blood-Stream Infection Quality Improvement Activity	16
Hepatitis B and Pneumococcal Pneumonia Vaccination Quality Improvement Activity	18
Population Health Focused Pilot Projects Quality Improvement Activity	20
Quality Incentive Program Quality Improvement Activity	22
National Healthcare Safety Network Data Quality Improvement Activity	24
ESRD Network Recommendations	25
Facilities that Consistently Failed to Cooperate with Network Goals	26
Recommendations for Sanctions	26
Recommendations to CMS for Additional Services or Facilities	26
Disaster Response	27

# **ESRD Demographic Data**

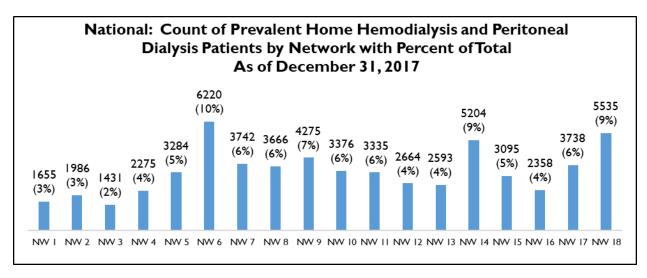


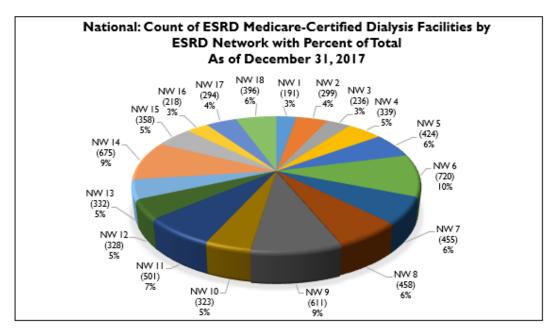


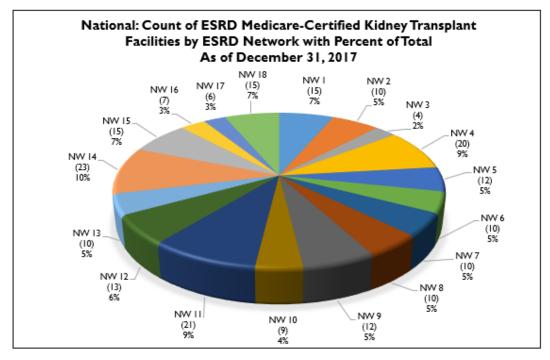




Source of data: CROWNWeb





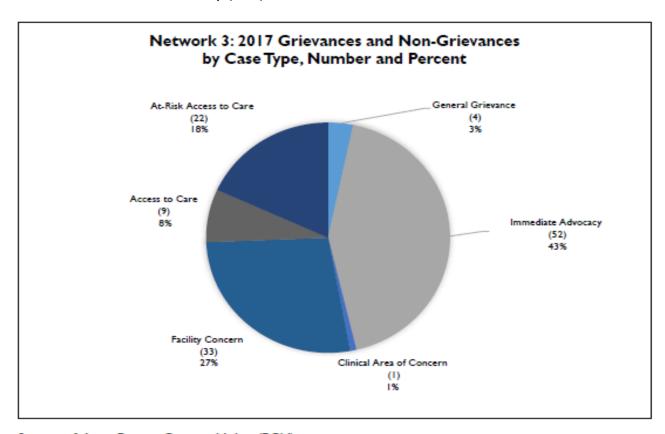


# ESRD Network Grievance and Access to Care Data

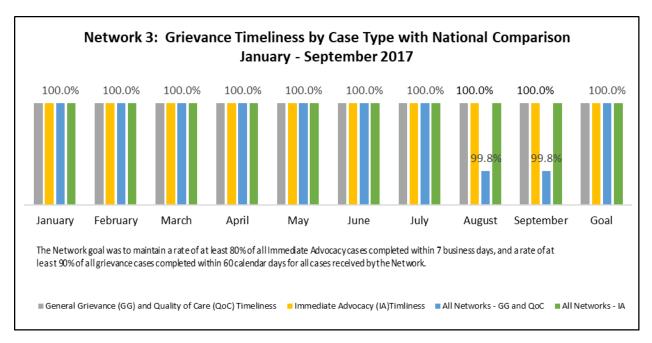
Network 3: Grievance Data for Calendar Year 2017

Category	Cases	
Grievance Cases	57	
General Grievance	4	
Immediate Advocacy	52	
Clinical Area of Concern	1	
Non-Grievance Cases	64	
Facility Concern	33	
Access to Care: Confirmed Involuntary Transfer/Discharge (IVT/IVD)	9	
At-Risk Access to Care	22	
Additional Case Information		
Averted IVT/IVD	0	
Failure to Place	5	
Total Cases 2017	121	

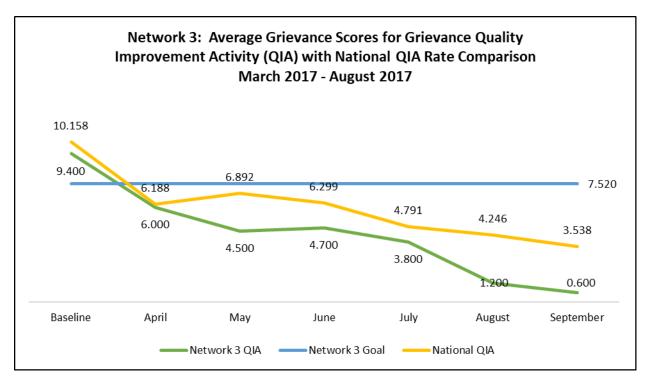
Source of data: Patient Contact Utility (PCU)



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**

**Goal of QIA**: Achieve a 20% decrease in a facility's average grievance severity score from baseline (March 2017) to re-measure (September 2017).

#### Results

Ten facilities from the Network 3 service area participated in the 2017 Grievance QIA. Each facility was responsible for recording all grievances filed by patients between April and September 2017 on a grievance log. The Network categorized each grievance on a scale of 1 (major) to 5 (minor) as each related to quality of care issues, environmental, operational or interpersonal. At the conclusion of the project, participating facilities exceeded the 20% reduction, with the aggregate score decreasing from 9.4 to 0.6.

#### **Interventions**

The project began in December 2016 with a kick off webinar. Facilities were educated about the project and the responsibilities they would have related to managing the grievances at their facility. Each facility was then required to educate its staff members about the importance of empathy utilizing the Patient Whisperer PowerPoint presentation. Facilities also were required to complete with their staff the Communications Module of the Five Diamond Patient Safety Program. We obtained patient input about this project and the interventions through our Patient Advisory Committee. We developed posters and educational handouts and distributed them to the participating facilities for use during this project.

#### **Identified Best Practices**

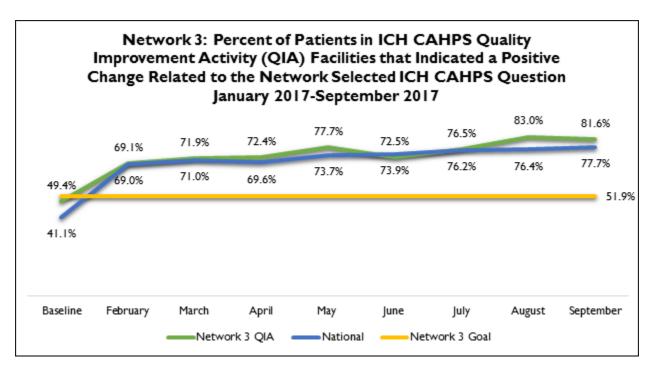
- Incorporation of the patient voice in monthly Quality Assessment and Performance Improvement (QAPI) meetings at the participating facilities.
- Completion of the Communications Module of the Five Diamonds Patient Safety Program, which helped direct care staff understand the impact of their interactions with patients and the subsequent effect it has on patient satisfaction.
- Utilization of the grievance logs to identify the patient concerns and developing plans for ameliorating them with the appropriate staff members.

#### **Identified Barriers**

- Patients fear that filing a grievance will result in retaliation by the staff.
   Patients need to be reassured that they have a right to file a grievance and that a positive outcome may benefit the entire facility.
- Staff need to be educated on the difference between an actual grievance and what may be a desire the patient may have for an amenity that is not required to be provided by the facility, e.g. ice machines or cable TV.

Staff have a perception that patient grievances are a poor reflection on their performance and patients' concerns/complaints should not be documented because it makes the staff look bad. Each grievance needs to be viewed as an opportunity for improvement.

# **ESRD Network Quality Improvement Projects**



Source of data: October 2017 ESRD Network Dashboard.

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

### In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems Quality Improvement Activity

Goal of QIA: Measure the impact of improved communication between patients and staff and the resulting positive responses to Question #18 of the In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH-CAHPS) survey: 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? Goal was a 5% improvement from baseline.

**Results:** Each of the 20 participating facilities was required to improve their monthly patient positive responses on Question #18 of the ICH-CAHPS. The overall goal for this project was to increase the percentage of patients who responded positively from 49.4% to 51.9%. The outcome was a consistent improvement each month, ultimately exceeding 5%.

**Interventions:** We provided in-service education to facility social workers that was then replicated at the facility with direct care staff. The focus was on empathic communication and listening.

A campaign was implemented entitled "Take Five". This program was originally utilized by Loyola University Medical Center and involved staff taking five uninterrupted minutes to sit with patients and allow them to guide the conversation. This technique is called "talking control support therapy." The goal was to establish connections between staff members and patients and improve communication.

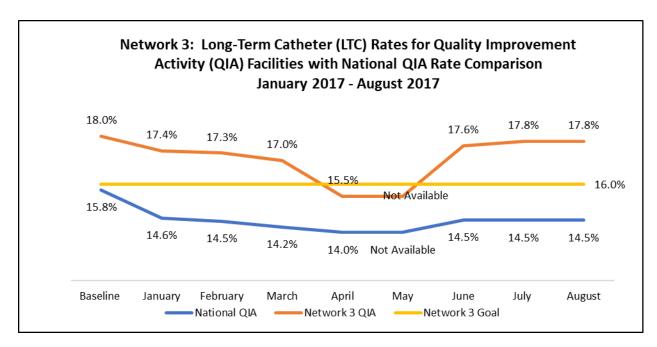
#### Identified Best Practices:

- Facilities that had multiple staff members conduct the five-minute interventions with patients showed strong positive results on the patients' subsequent survey of Question #18. This strategy helped patients feel the staff members were concerned about the impact of kidney disease on their lives
- It was important that all members of the interdisciplinary team be involved in the interventions. Each staff member plays a role with patients and their interactions have significant implications for patients' perceptions of staff concern and caring.

#### **Identified Barriers**

Survey fatigue with patients was a barrier that had to be addressed. Patients
are asked to complete the Kidney Disease Quality of Life (KDQOL) survey at
least once per year and the ICH CAHPS survey twice a year. The staff had to
overcome the patients' fatigue and educate them on the project and the
overall benefit of completing the surveys.

There are constraints on staff time and often they did not have time to focus on the Take Five campaign. There needed to be buy-in from the staff as to the benefits of these interactions in order to make them successful.



#### **Long Term Catheter Quality Improvement Activity**

**Goal of QIA**: Reduce the long- term catheter (LTC) rate through an individualized approach that evaluated current corporate and individual facility processes.

**Results:** One hundred fourteen (114) facilities were included in this QIA. We grouped facilities into five different cohorts that were based on facility type, organization and/or geographic location. At the conclusion of this project, we failed to meet the 2-point reduction in LTC.

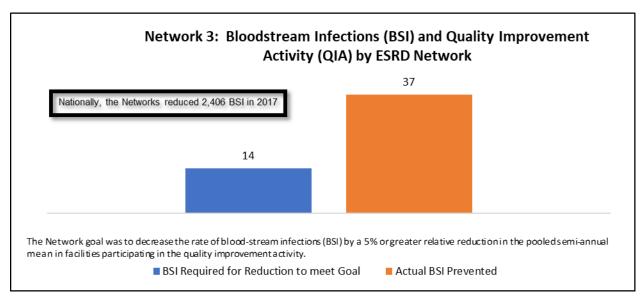
#### **Interventions**

- We met with regional leadership from each of the Large Dialysis Organizations (LDOs) to develop individual approaches for their facilities.
- We conducted monthly cohort-specific coaching calls to identify best practices and areas of need
- Using the Institute for Healthcare Improvement Model for Improvement, organizations completed a root cause analysis for each participating cohort and established an improvement plan. We monitored facilities through feedback received on Plan, Do, Study, Act (PDSA) cycles.
- We promoted the Fistula First Catheter Last (FFCL) Change Concepts and the Lifeline for a Lifetime resources and developed a bundle facilities could use to address:
  - 1. Initiation and Continuity of a Process
  - 2. Timely Creation of a Vascular Access Plan
  - 3. Designated Vascular Access Manager
  - 4. Routine Meetings with the Facility Interdisciplinary Team
  - 5. Patient and Staff Education
  - 6. Celebrating Success

#### **Identified Best Practices**

- Tracking tool developed by one corporation for minor access complications not captured in medical record
- Regional Vascular Access Coordinators that provide oversight and training to local facility vascular access coordinators.
- Use of clinical support specialist in follow up of vascular access quality improvement.

- Patient refusal or missed appointments. In some cases, patients with an arteriovenous fistula (AVF) or an arteriovenous graft (AVG) refuse to begin the cannulation protocol.
- Errors in reporting of vascular accesses in CROWNWeb
- Ongoing challenges in Puerto Rico related to the financial crisis



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

#### **Blood-Stream Infection Quality Improvement Activity**

**Goal of QIA:** Reduce dialysis event rates, specifically bloodstream infection (BSI) rates, and demonstrate a 5 percent or greater reduction in the pooled mean at remeasurement (first- and second-quarter of 2017) compared to the baseline (first- and second-quarter of 2016). Focus facilities were encouraged and supported in the implementation of the Centers for Disease Control and Prevention (CDC) Core Interventions and appropriate use of the CDC Prevention Process Measure audit tools.

**Results:** At the conclusion of this project, the goal of 5% reduction was achieved.

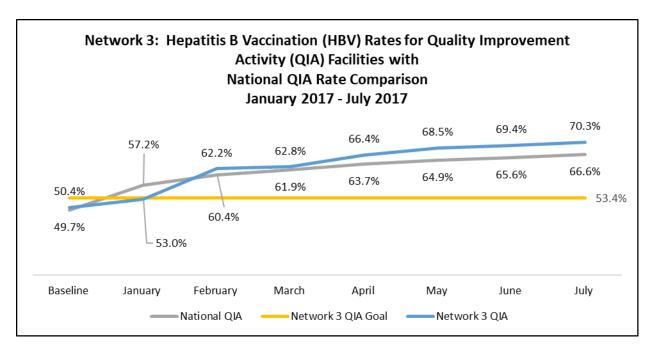
#### **Interventions**

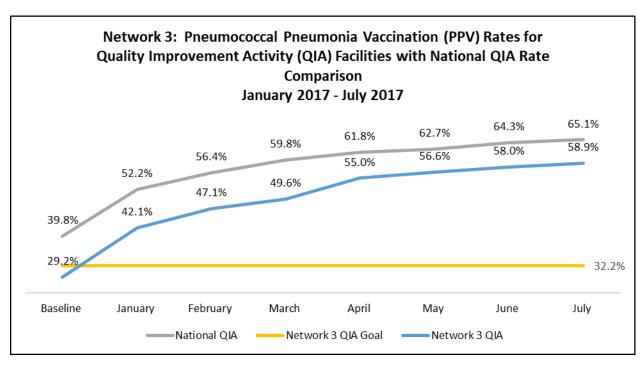
We recommended that dialysis facilities adopt an assessment and response approach and continuously monitor prevention practices and intervene based on the observed findings. Facilities were provided clinical education and instruction on the CDC Core Interventions and Prevention Process Measure audits. Facilities conducted an assessment of prevention process measures using these audit tools and established plans to improve practices. Facilities were kept informed of CDC-led educational opportunities. We monitored data quality each month and provided feedback on the errors found as indicated. As requested by facilities, we provided assistance in the development of improvement plans. Finally, we conducted visits to facilities with low adherence rates.

#### **Identified Best Practices**

- Daily huddles and debriefing with staff
- Engaging patients in hand hygiene observations
- Use of audit results and findings to reinforce facility policies and procedures
- Incorporating the facility's education department to conduct audits and reeducate staff
- Posting laminated copies of catheter connection and disconnection procedures at each station for staff reference.

- Staff inability to dedicate time to conduct the audits
- Staff rushing through vascular access procedures not allowing antiseptic to dry
- Failure to perform hand hygiene after removing gloves





### **Hepatitis B and Pneumococcal Pneumonia Vaccination Quality Improvement Activity**

**Goal of QIA:** Increase hepatitis B (HBV) and pneumococcal pneumonia (PNEU) vaccination rates in twenty Network 3 facilities demonstrating lower rates of the two vaccinations in the baseline period (less than 60% of eligible patients vaccinated for each). The goal for 2017 was an increase of 3 percentage points over baseline rates with an overall goal of 60%.

#### **Results:** At the conclusion of this project:

- 1) Hepatitis B Vaccination (HBV)
  - a. Twenty of twenty facilities achieved the required 3 percentage point rate increase
  - b. Sixteen of twenty facilities had final rates greater than 60%.
- 2) Pneumonia Vaccination (PNEU)
  - a. Eighteen of twenty facilities achieved the required 3 percentage point rate increase
  - b. Eleven of twenty facilities had final rates greater than 60%.
  - c. One facility failing to improve provided recent facility vaccination data showing fifteen additional vaccination recipients than the available CROWNWeb data. Facility manager was educated regarding sustaining the vaccination program and validating data entry.

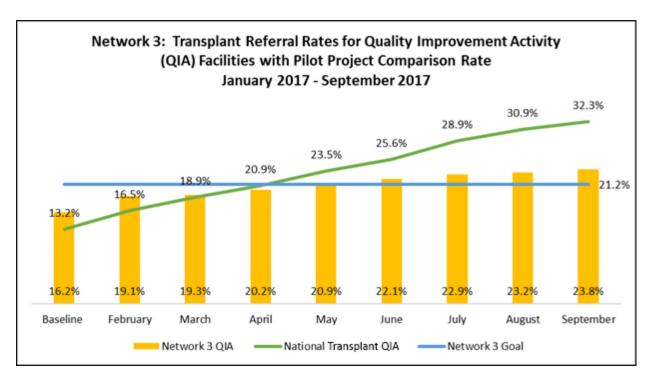
#### Interventions

- Kickoff webinar
- Education about root causes of low vaccination rates for facility staff and patients
- Education about data reporting and validation in CROWNWeb
- Provision of facility and patient level feedback reports to assist facilities to identify vaccination needs and monitor progress
- Individual facility follow up via coaching call or facility visit

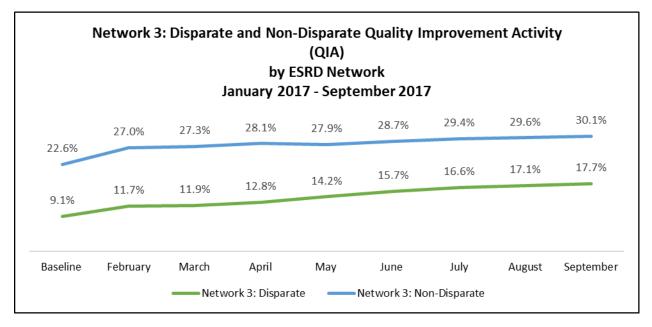
#### Identified Best Practices

- Assessment of patient vaccination needs upon admission and thereafter on a routine basis such as monthly or quarterly
- Education of patients to share documentation about vaccinations received from other providers
- Initiation of contact by dialysis facilities with other providers to obtain vaccination administration information

- Vaccination documentation from non-dialysis providers is often paper-based and can be difficult to obtain by facility staff.
- Patients are often unable to identify which vaccination they received outside of the dialysis facility and/or the location of the vaccination provider



Source of data: October 2017 ESRD Network Dashboard



Source of data: October 2017 ESRD Network Dashboard

<sup>\*</sup>Disparate population is Hispanic or Latino and non-disparate population is Not Hispanic or Latino

#### **Population Health Focused Pilot Projects Quality Improvement Activity**

**Goal of QIA**: Improve transplant referral rates by 5% in project facilities with referral rates of 25% or less and reduce the identified disparity (ethnicity), Hispanic/non-Hispanic, by 1 percentage point during the project period.

#### **Results:** At the conclusion of this project:

- All referrals increased 7.6%
- Referrals of Hispanic patients increased 16.8%
- Referrals of non-Hispanic patients increased 7.5%
- The identified disparity decreased by 9.3%

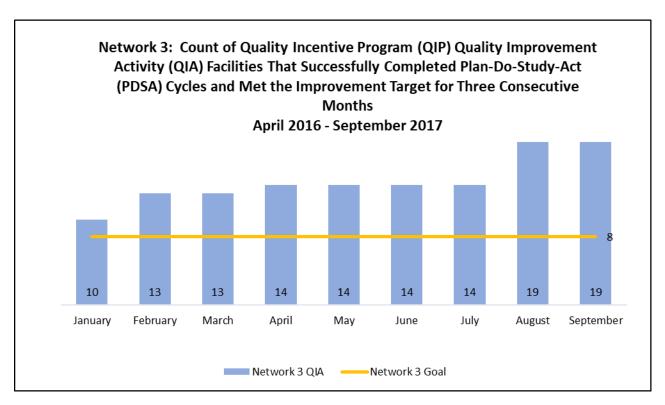
#### Interventions

- Kick off meeting/webinar for corporate leadership, transplant centers and dialysis facility staff
- Implementation of the IHI Model for Improvement with the use of PDSA cycles.
- Distribution of educational resources about transplant to patients and facility staff
- Use of a communication tool for staff to use to discuss, track and communicate status of patient referral internally and to Network office
- Coaching calls and/or facility visits to discuss project goals and facility progress

#### **Identified Best Practices**

- Assignment of dedicated staff to educate and follow up with patients regarding transplant referrals
- Establishing relationships with transplant centers to communicate more easily and to serve as a resource for patient and staff education
- Chair-side visitation by transplant team member or post-transplant patient

- Patient lack of education or interest in transplant
- Patient lack of secondary insurance for transplant surgery, medications and follow-up care.
- Lack of follow-up or assistance navigating transplant referral process
- Lack of transportation to transplant center or follow-up testing or appointments
- Multiple medical conditions or unstable status delaying referral process



Source of data: October 2017 ESRD Network Dashboard

#### **Quality Incentive Program Quality Improvement Activity**

**Goal of QIA**: Assist nine of the poorest performing facilities in Kt/V adequacy from the Network 3 service area in completing at least one full PDSA cycle <u>and</u> work to achieve at least a 25% improvement (RI) in the facilities' overall Kt/V adequacy performance rate <u>or</u> exceed the ESRD QIP penalty threshold for three consecutive months by the end of third quarter of 2017. Continue assistance in 2017 with one facility carried over from 2016 on achieving a 25% reduction in hypercalcemia rates for a total of 10 facilities assisted in 2017.

**Results:** At the conclusion of this project, 7 of 10 facilities were improving and trending towards meeting their improvement goal for adequacy. The facility working to improve hypercalcemia achieved their RI goal.

- 3) Five facilities maintained three consecutive months of meeting the 25% RI Goal. Four were graduated and one became eligible with July data.
- 4) One facility maintained two consecutive months of meeting the 25% RI Goal, lapsed for one month then returned to 25% RI goal
- 5) Three facilities did not meet the 25% RI Goal for any month
- 6) The facility focusing on improving their hypercalcemia rate maintained three consecutive months of meeting the 25% RI goal in late 2016 and early 2017 and then was rolled into the adequacy project.

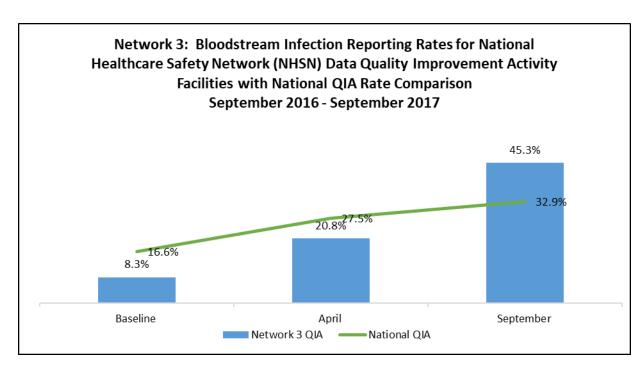
#### **Interventions**

- Conducted kick off webinar
- Distributed project-specific toolkit containing improvement concepts from the *Institute for Healthcare Improvement* (IHI) model for improvement along with a balance of quality improvement tools to assist with PDSA cycles and root cause analysis.
- Monthly coaching calls instituted with facilities demonstrating no improvement

#### **Identified Best Practices**

- Utilization of weekly patient- specific lab reports (Kt/V)
- Monthly team review of patient specific needs to improve Kt/V (Treatment duration/frequency, dialyzer size)
- Use of Kt/V algorithms and decision tress for addressing sub-optimal Kt/V results
- Education of all clinical staff on how to achieve most optimal blood flow for all patients

- Smaller facilities can miss the improvement goal if just one patient does not meet their Kt/V adequacy.
- Smaller independent facilities with frequent staff turnover can miss reporting deadlines which negatively impacts performance scores



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

#### **National Healthcare Safety Network Data Quality Improvement Activity**

**Goal of QIA:** Improve communication between hospitals and dialysis facilities thus increasing reporting of Positive Blood Cultures (PBCs) in NHSN that would be missed without effective communication. The primary quality measure used in this QIA is the percentage of BSIs reported during the first calendar day of admission in the hospital.

**Results**: Twenty-two facilities selected to participate in this QIA had reported they did not have a process in place for identifying if patients had infections identified on hospital admission. At the conclusion of the QIA, all facilities had developed a strategy to improve communication and capture of infections identified on admission.

#### **Interventions**

- Facilities were educated on the CDC NHSN Dialysis Event Protocol during the project introduction call.
- Using the Institute for Healthcare Improvement Model for Improvement, facilities completed a root cause analysis and established a plan for improving communication and information exchange with the hospitals their patients frequented the most.
- We developed a hospitalization tracker and PDSA reporting form that facilities completed and submitted for review.
- To assist facilities in their communication efforts with hospitals, we solicited assistance from the local Association for Professionals in Infection Control and Epidemiology (APIC) chapter in the development of a hospital infection prevention professional directory.
- We encouraged facilities to join a local county Care Coordination Coalition.
   Five coalitions were established in different counties by the Quality
   Improvement Organization (QIO) to reduce hospitalizations and improve
   transitions of care.

#### **Identified Best Practices**

- Facilities joined coalitions and began discussions to assess and improve the utilization of New Jersey's state mandated Universal Transfer Form.
- Facilities obtained access to hospital electronic medical records (EMR).
- Facilities reported they had better results when they called the hospital while patients were still admitted.
- Nephrologists were engaged and assisted with facilitating sharing of information.

- Some hospital infection prevention staff was not receptive to the requests for information.
- Some positive blood cultures were not dialysis access related infections but according to the NHSN Dialysis Event protocol, are still reportable to NHSN.

# **ESRD Network Recommendations**

#### **Facilities that Consistently Failed to Cooperate with Network Goals**

All facilities in the Network 3 geographic area cooperated fully with Network goals and participated in our quality improvement interventions when requested.

#### **Recommendations for Sanctions**

We did not recommend sanctions for any facilities in 2017.

#### Recommendations to CMS for Additional Services or Facilities

We did not recommend any additional services or facilities in 2017. The facilities and services available to patients in the Network 3 geographic area are well distributed and are readily accessible to patients in need.

# **Disaster Response**

**Event(s) Name:** Hurricanes Irma and Maria

**Type of Event:** Natural Disaster Category 5/4 Hurricanes

Event(s) Date(s): September 6, 2017 and September 20, 2017

**Regions Impacted:** US Virgin Islands (Saint Thomas, Saint Croix and Saint John)

Puerto Rico (including Vieques and Culebra)

#### Dialysis Population (9/1/17)

<b>Puerto Rico Dialysis Centers</b>	<b>US Virgin Islands Dialysis Centers</b>
<ul> <li>28 Fresenius Kidney Care</li> </ul>	<ul><li>2 Centers in Saint Thomas</li></ul>
<ul><li>17 Atlantis</li></ul>	<ul><li>2 Centers in Saint Croix</li></ul>
<ul> <li>1 University Hospital</li> </ul>	
<ul> <li>1 Veterans Administration</li> </ul>	
<ul><li>1 Pediatric</li></ul>	
Total: 48 Dialysis Centers	Total: 4 Dialysis Centers
Patient Count: 6,013	Patient Count: 244

Data Source: CROWNWeb

#### Hurricane Irma

On September 6, 2017, Hurricane Irma, a 400 mile wide Category 5 storm with 185 mph winds, one of the most powerful storms ever recorded in the Atlantic, impacted the U.S. Virgin Islands and Puerto Rico. The storm ravaged Saint Thomas and Saint John, destroying the infrastructure of both islands. Irma's winds ripped off the roof of the Roy Schneider Medical Center, the only hospital in St. Thomas, disabled the island's 911 emergency system, destroyed 90% of the island's power lines and 80% of its transformers, and damaged St. Thomas' airport, which complicated all recovery efforts. Authorities set up an Incident Command Post in Saint Croix, which sustained less damage and is roughly 40 miles south of St Thomas. Both dialysis centers in St Thomas suffered damage and could not sustain long-term operations. Dialysis patients were evacuated to San Juan, Puerto Rico. The two dialysis centers in St Croix reported stable conditions.

Hurricane Irma traveled 55 miles north of San Juan, Puerto Rico on Wednesday, September 6, 2017. Although the storm did not make landfall in Puerto Rico it impacted the island's infrastructure. The executive branch of Puerto Rico reported 39-42% of Puerto Rico's hospitals were operating with generators and 17% of the population was without access to potable water. Electrical Power Authority reported that 68% of its consumers were without power. Some areas had 2-8 inches of rain while some had up to 12 inches of rain. Some dialysis facilities sustained minor flooding and 13% were operational with generators. However, two days after the storm all dialysis centers in Puerto Rico were operational.

#### Hurricane Maria

On September 16, 2017 Maria quickly intensified to a Tropical Storm due to the highly favorable environmental conditions. Just two days later on September 18 the storm reached Category 5 strength en route to the U.S. Virgin Islands and Puerto Rico. At its peak intensity over the eastern Caribbean, Maria achieved maximum sustained winds of 175 mph, making it the tenth-most intense Atlantic hurricane on record. On the night of Tuesday September 19 the center (eye) of Maria brushed St. Croix, when the hurricane was a Category 5. A sustained wind of 104 mph with a wind gust of 137 mph was reported in the western portion of St. Croix. Hurricane Maria ravaged St. Croix, the largest of the U.S. Virgin Islands, tearing off roofs, downing trees and decimating the communications and power grid across the island. In many places across the three major islands (Saint Thomas, Saint Croix and Saint John) Maria destroyed what Hurricane Irma did not. The two dialysis centers in St Croix reported damages that would prevent them from sustaining their operations long term. The majority of dialysis patients were evacuated to Atlanta, GA.

Weakening slightly, on September 20 Maria struck Puerto Rico as a Category 4 hurricane. Hurricane Maria made landfall in Puerto Rico with winds reaching 155 mph. The storm was the first Category 4 hurricane to strike the US territory since 1932. Hurricane Maria destroyed Puerto Rico's power grid leaving millions without electricity, cellphone and internet service. On September 21 only 38% of the dialysis facilities in Puerto Rico were accounted for and 28% of all facilities were operational. All were operating with generators and cisterns. By September 26 only 5% of the island had power restored, less than half the population had tap water, and 95% of the island had no cell phone service. As a result of Maria's impact to Puerto Rico three dialysis facilities had to close due to damages.

#### **Network Interventions**

Our focus from September to November 2017 mainly shifted to the response to these emergencies. During this time we took on the role of providing direct support with evacuation and arrangement of sheltering, dialysis treatment, transportation, feeding and follow up of over 100 Saint Thomas dialysis patients when they were evacuated from Saint Thomas to Puerto Rico, from Puerto Rico to Miami, and from Miami to Atlanta, GA. We were also tasked with assisting evacuation efforts of Saint Croix dialysis patients directly to Atlanta. On September 18 two Network staff were deployed to Puerto Rico for 11 days to support the Puerto Rico Emergency Operations Center (PR EOC) staff as ESRD Logistic Commanders. All Network staff worked around the clock to mitigate the impacts of these two events.