

ESRD NETWORK 4 2019 ANNUAL REPORT



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ESRD DEMOGRAPHIC DATA



Corporate Affiliation

Quality Insights Renal Network 4 (QIRN4) is part of the Quality Insights family of health care improvement companies. In 2019, Quality Insights held the Medicare Quality Improvement Network-Quality Improvement Organization (QIN-QIO) contracts for Delaware, Louisiana, New Jersey, Pennsylvania, and West Virginia and three ESRD Network contracts: Quality Insights Renal Network 5 (covering Maryland, Virginia, West Virginia and Washington DC), Quality Insights Renal Network 3 (covering New Jersey, Puerto Rico and the US Virgin Islands), and Quality Insights Renal Network 4 (QIRN4).

Geographic Description

QIRN4 is responsible for two neighboring states, Pennsylvania and Delaware, which are located in the Northeast United States.

Pennsylvania is made up of 67 counties that cover 44,827 square miles. As of December 31, 2019, there were 18,848 patients were receiving dialysis services in the state of Pennsylvania. Those patients who were treated at an in-center hemodialysis center did so at one of 327 Medicare-approved dialysis centers, a Medicare-approved Veterans Administration Medical Center (VAMC) unit, or two non-Medicare-approved VAMC units.

Delaware, the other state in the Network 4 service area, is made up of three counties, spans 1,954 square miles, and is the fourth smallest state in the country. Delaware's location provides patients with easy access to several of the major metropolitan areas of the Northeast, including Washington, D.C., Philadelphia, and Baltimore. As of December 31, 2019, there were 1,813 patients were receiving dialysis services in the state of Delaware. Those who were treated at an in-center hemodialysis facility did so at one of 32 Medicare-approved dialysis facilities or at one non-Medicare-approved Veterans Affairs Medical Center (VAMC) unit.

As shown in Figure 1, as of December 31, 2019, there were 17,984 patients receiving treatment in dialysis facilities in the Network 4 service area, and an additional 2,677 patients receiving treatment in their homes. This total of 20,661 patients receiving dialysis, plus an additional 12,862 patients living with a functioning kidney transplant in the Network 4 service area brings the total ESRD patient count for this area to 33,523. As shown in Figure 2, in 2019 5,182 patients started dialysis in Network 4 facilities – 4,474 in-center and 708 at home. An additional 190 patients received a transplant before requiring dialysis.

The number of ESRD facilities in the Network 4 service area, by treatment modalities offered, is shown in Figure 3. During 2019 there were 20 transplant centers, 174 dialysis centers offering both in-center dialysis and home dialysis support, 176 dialysis centers offering in-center dialysis only, and 16 dialysis centers offering home dialysis support only, for a total of 366 dialysis centers and 386 centers that support ESRD patients.

Figures 4 through 7 illustrate the percentage of national totals of patients and facilities that those in the Network 4 service area constitute.



Figure 1- Number of Patients Treated in the Network 4 Service Area as of December 31, 2019 by Treatment Modality

Figure 2- Number of Incident Patients Treated in the Network 4 Service Area in 2019 by Treatment Modality



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



Figure 3 -Number of Medicare-Certified Facilities in the Network 4 Service Area by Modality Offered as of 12/31/2019



Figure 4 - Percent of National Prevalent Dialysis Patients in each Network Service Area as of 12/31/2019



Figure 5 - Percent of Incident Dialysis Patients in each Network Service Area as of 12/31/2019



Figure 6 - Percent of Medicare-Certified Dialysis Facilities in each Network Service Area as of 12/31/2019



Figure 7 - Percent of National Home Hemodialysis and Peritoneal Dialysis Patients in each Network Service Area as of 12/31/2019







Figure 9 - Percent of Medicare-Certified Kidney Transplant Facilities in Each Network Service Area as of 12/31/2019

ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA



Grievance Activities

The ESRD Network contract indicates the following in Section C.3.22.A. Evaluate and Resolve Grievances: "The Network's case review responsibilities shall include taking all necessary steps to evaluate and resolve grievances filed by, or on behalf of, one or more ESRD patients. A grievance is defined as a formal or informal written or verbal complaint that is made to any member of the dialysis or transplant center staff by a patient, or the patient's representative, regarding the patient's care or treatment."

QIRN4 ensures that patients are aware of their rights to file a grievance at their dialysis or transplant facility as well as with us.

QIRN4 employs a trained social worker and nurses who are adept at managing patient and/or family members' grievances. Based on the many years of experience our staff have as direct care practitioners in the dialysis and transplant settings, we have an understanding of the dynamics of these settings. This experience allows us to investigate the grievances received with the skills necessary to ensure a fair and patient-centered approach to the investigation. We received 96 calls during which we could provide immediate advocacy in 2019. These cases included treatment related/quality of care issues, staff related issues, and physical environment concerns.

We also investigated four Clinical Quality of Care cases filed by patients in 2019. These cases required the review of medical records by a Registered Nurse. Each case resulted in recommendations for the staff with regard to appropriate care of the patients. These cases were also teaching opportunities for the staff that ultimately impacted the well-being of all patients at these two facilities.

QIRN4 is also responsible for addressing Access to Care cases with our providers. In 2019 we had 41 contacts from dialysis providers regarding access to care issues that included Involuntary Discharge (IVD) cases, Involuntary Transfer (IVT) cases, as well as patients At Risk for IVD/IVT.

We are also responsible for addressing concerns identified by staff at dialysis facilities involving patients who have exhibited behaviors that are difficult to manage. These patients may eventually end up at risk for IVD/IVT, and our early intervention helps the facility staff find alternatives that help reduce the need for discharges. In 2019, we fielded 34 Facility Concerns.

The goal of each interaction with patients and staff is to ensure the care provided to and received by patients meets the ESRD Conditions for Coverage. This care cannot be provided if patients are involuntarily discharged from their dialysis provider. Every interaction with facility staff related to problem patient behavior is focused on actions that the staff can take to help patients alter their behaviors to ensure they can remain in their current facility.



Figure 10 - Types of Grievances and Non-Grievances Received by QIRN4 in 2019

ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA



Long Term Catheter Quality Improvement Activity

Goal: Catheter reduction was a subproject within the Bloodstream Infection (BSI) Quality Improvement Activity (QIA). Fifty-one facilities in the BSI QIA with more than 15% of their patients receiving dialysis by way of a catheter for more than 90 consecutive days (called long term catheters or LTC) were to reduce that rate by 2 percentage points.

Results: As shown in Figure 11, we did not achieve the stated goal.

Interventions

- 1:1 coaching calls to all facilities to discuss self-identified process barriers and/or patient barriers followed by assistance with development of a quality improvement (QI) plan using the Institute of Healthcare Improvement's (IHI) Model for Improvement: Plan-Do-Study-Act (PDSA) cycle
- Medical Directors were sent a letter of notification of participation in the QIA, which included a summary of the project, baseline data, clinic goal and an 'ask' for their active engagement in this QIA. Feedback on the use of this letter was positive.
- Mid-project: Distributed LTC reduction strategies to facilities struggling to achieve their clinic goal. These strategies were gathered from facilities that were successful at achieving their clinic goal prior to the conclusion of the QIA. The names of successful clinics were included to encourage outreach.

Identified Best Practices

- We provided a project Kickoff in the format of a YouTube video and a recorded PowerPoint presentation. Feedback favored having both types of recorded formats versus the live format and PowerPoint presentation used in previous years. Two live question and answer sessions were provided; one at 10 days and a second at one month after presentations were posted for viewing. Fewer than 20 clinics attended each call and only two questions were asked and answered. There were fewer requests from clinics for clarification of the project compared to previous years.
- Coaching calls These calls were time intensive and very robust including review of current and historical Fistula First, Catheter Last (FFCL) data, current strategies to address barriers and recommendations for implementing alternative strategies to replace current, ineffective strategies. This collaborative effort resulted in managers having a better understanding of the PDSA cycle and a willingness to try a new approach. We held them accountable to report on their progress by requiring them to submit completed PDSA cycles for review. These calls also provided us with a better understanding of the complexities/barriers experienced by each facility thereby helping us to tailor strategy recommendations.
- Monthly calls to facilities with incomplete reporting to CROWNWeb prior to the monthly closure date.
- Patient engagement: Patients were asked to identify a best practice for LTC reduction. The most frequent responses were early education and early access placement

Identified Barriers

- Patient refusal due to needle phobia or fear of surgery
- Medical condition unsuitable or exhausted access sites
- Limited availability of surgeons
- Extended maturation times



Figure 11 – LTC Rates for Network 4 and National Targeted Dialysis Facilities

Blood-Stream Infection Quality Improvement Activity

Goal of QIA: Achieve a 20% or greater reduction in the aggregate BSI rate from the baseline period (first and second quarter of 2018) by the end of June 2019 in 73 target facilities with the highest excess infection rates in 2018.

Results: As shown in Figure 12, at the conclusion of this project, the facilities in this project exceeded the goal by experiencing 114 fewer infections, compared to a goal of 51 fewer infections. Additionally, as show in Figure 13, by September 30, 90.6% of dialysis facilities in the Network 4 service area had at least one person who completed the CDC's National Healthcare Surveillance Network (NHSN) Dialysis Event Surveillance Training, exceeding the goal of 90%. In 55.6% of the Network services area facilities, access was gained to a hospital electronic medical record (EMR) or to a regional or national health information exchange (HIE) as shown in Figure 14. The CDC believes this access will allow facilities to better capture infections identified during a hospitalization and report them to NHSN.

Interventions

- Implementation of as many of the CDC Core Interventions for BSI Prevention as allowed by each clinic's organizational policies. Particular emphasis for monitoring was placed on patient participation in hand hygiene auditing of healthcare workers. There was also focus on staff performance of catheter connection/disconnection and Scrub the Hub protocols, as these are the areas with potential to have the most impact on BSI reduction.
- Use of the IHI Model for Improvement PDSA cycle to test change, including the use of root cause analysis (RCA)
- Participation in NCC's pilot of Clean Hands Count patient educational materials
- Medical Directors were sent a letter of notification of participation in the QIA that included a summary of the project, baseline data, clinic goal and an 'ask' for their active engagement. Feedback on the use of this letter was positive

Identified Best Practices

- Patient recruitment letter A Patient Recruitment letter was developed in collaboration with Patient Subject Matter Experts to encourage patient engagement in hand hygiene auditing of healthcare workers. Fifty seven percent of facilities found this tool "Useful." Seventy-one percent of facilities reported patient engagement in hand hygiene audits; this was an increase from 32% in 2018
- Core Interventions Self-Assessment tool CDC Core Interventions Self-Assessment tool was developed in collaboration with Network 3. This tool was used to educate clinics on the expectations of how to fully implement each core intervention and resulted in a comprehensive evaluation of the clinic's baseline performance. Facilities weighted this tool 3.85 out of 5 for "usefulness"
- Infection Control Assessment & Response (ICAR) survey We again partnered with the Philadelphia Department of Public Health and the Pennsylvania Department of Health /Epidemiology Division to provide an opportunity to select facilities to receive a voluntary ICAR. Fourteen clinics accepted this offer. Feedback was positive despite the intensity of this survey
- Patient participation in staff hand hygiene audits As shown in Figure 15, facilities that had some form of patient participation via audits or verbal feedback, had a greater relative reduction in their BSI rate from baseline (-34.88) compared to those without patient participation (-28.27)
- Patient feedback on staff performance of hand hygiene Clinic managers obtained verbal feedback of hand hygiene practices through direct questioning of patients. This method allowed for many more patients to provide timely feedback without fear of retribution from staff which was a concern expressed by a patient SME. The questions prompted only general comments about adherence such as evaluating performance of all nurses on a scale of 1 to 5 stars for a particular hand hygiene opportunity such as 'after removing gloves'

• Site visits to poorest performers –There were eight visits to facilities to review and discuss BSI and LTC rates, review/educate leadership on how to perform a PDSA cycle, share successful strategies from other facilities and build stronger relationships between QIRN4 and facilities. All visits were considered successful and valuable by both QIRN4 and the clinic staff

Identified Barriers

- Corporate policy(s) do not permit the use of antimicrobial ointment with each CVC dressing change which is part of Core Intervention #9
- Facility resistance to patient participating in quality improvement team meetings. At baseline, there were 12 facilities with patient participation and at the conclusion there were 17. Barriers included patients not wanting to spend non-dialysis time at the clinic, staff reluctance, patient illness and patients' general lack of interest



Figure 12 - Number of BSIs to be Reduced Compared to Total Reduced in Network 4 Target Facilities Network 04: Reduction in Bloodstream Infections (BSI) in QIA Facilities

Figure 13 - Percent of Facilities in the Network 4 Service Area That Had One Staff Person Complete NHSN Training





Figure 14 - Percent of Focus Facilities with Access to a Hospital's Electronic Medical Record (EMR) or a Regional or National Health Information Exchange (HIE)

Figure 15: Network 4: Comparison of Relative Change in Bloodstream Infection Rate With and Without Patient Engagement in CDC Hand Hygiene Audits January 2019- June 2019



Transplant Waitlist Quality Improvement Activity

Goal of QIA: Enlist 30% (105 participating facilities; 5,464 patients) of dialysis facilities in the Network 4 service area, regardless of modality, to participate in the transplant QIA. The goal was to demonstrate at least a 2-percentage point improvement in the natural trend of eligible patients placed on the transplant waitlist by the end of September 2019. The goal was to add an additional 333 counts to the transplant waitlist by the of the project period.

Results: As shown in Figure 16, at the conclusion of the project, the overall kidney transplant waitlist rate continues to increase but unfortunately we did not achieve the set CMS goal.

Interventions: Improvement methods used for this QIA centered primarily on the use of the Institute for Healthcare (IHI) Model for Improvement and included the use of root cause analysis (RCA), development of a facility-specific quality improvement plan, and use of Plan-Do-Study-Act (PDSA) cycle(s) to test change. As targeted facilities submitted their monthly progress reports, facilities were expected to make changes to their proposed interventions if necessary until the completion of the project. Additionally, QIRN4 planned a multi-pronged approach that included comparative feedback reports, encouragement of process changes at the dialysis unit, and development of transplantation educational materials geared toward identified barriers.

To fill the communication gap reported by dialysis facilities and transplant centers to track patients, we developed and disseminated patient level reports to both entities. We sent patient level reports that allowed providers to identify patients' active/inactive wait list status and removal codes. Transplant centers used their reports to identify patients' dialysis facility locations and contact numbers.

Identified Best Practices: We utilized the Pareto Principle (80 percent of the consequences come from 20 percent of the causes) to encourage providers to focus interventions on their top barriers. Providers reported incorporating transplant education in the in-center dialysis routine. The most prominent education interventions reported by the facilities were holding transplant education "lobby days" and one-to-one education by various staff members including nephrologists. One other best practice was the mobilization of two QIRN4 patient advocates to lead some of these educational lobby days and mentor patients on a one-to-one level. The two advocates visited 32 facilities and spoke with over 530 patients about transplant and/or home dialysis. Twenty-two of the visits primarily focused on transplant. The patient advocates were well received by providers and patients alike. This collaborative approach contributed to the number of patients added to the transplant waiting list during the project period. The table below details the results of the visits with the focus on transplant.

# of Facilities Patient Advocates Led Education Lobby Days	# of Patients That Advocates Spoke with	# of Patients Who Expressed Interest after the Initial Patient Advocate Interactions	# of Patients at the Start of the QIA on the Waiting List from the facilities with Patient Advocate Intervention	# of Patients at the End of the QIA on the Waiting List from the facilities Patient Advocate Intervention
22 Transplant Focus	422	128	5	42

QIRN4 Patient Advocates' Intervention Results:

Identified Barriers: Top barriers for getting patients on the transplant waitlist included the burdensome process of transplant evaluation and long wait for a transplant, lack of follow up with appointments, educational knowledge gap for both facility staff and patients, and lack of communications between the dialysis providers and transplant centers



Figure 16 - Percent of Patients on Transplant Waitlist, Network 4 and National Target Facilities

Home Therapy Quality Improvement Activity

Goal of OIA: Enroll 30% (105 participating facilities; 5,582 patients) of dialysis facilities in the Network 4 service area to achieve at least a 2-percentage point increase in the natural trend of patients using a home modality by the end of September 2019. The goal was to achieve 596 home dialysis initiations.

Results: As shown in Figure 17, the facilities in the project exceeded CMS expectation. There were 647 patients who initiated home dialysis during the project period.

Interventions: Improvement methods used for this OIA centered primarily on the use of the Institute for Healthcare (IHI) Model for Improvement and included the use of root cause analysis (RCA), development of a facility-specific quality improvement plan, and use of Plan-Do-Study-Act (PDSA) cycle(s) to test change. As targeted facilities submitted their monthly progress report, facilities were expected to make changes to their proposed interventions if necessary until the completion of the project. Additionally, QIRN 4 planned a multi-pronged approach that included comparative feedback reports, encouragement of process changes at the dialysis unit, and development of home dialysis educational materials geared toward identified barriers.

Identified Best Practices: QIRN4 encouraged providers to focus interventions on their top barriers. Providers reported incorporating home dialysis education in the in-center dialysis routine for patients as well as staff members. One of the most notable education interventions reported by the facilities was utilizing Kidney Care Advocates (specialized educators) to provide home dialysis education for patients and staff members. Another best practice was the mobilization of two QIRN4 patient advocates to lead education lobby days and mentor patients on a one-to-one level. The two advocates visited 32 facilities and spoke with over 530 patients. Ten of the visits primarily focused on home dialysis. The patient advocates were well received by providers and patients alike. This collaborative approach contributed to the number of in-center patients utilizing home dialysis during the project period. The table below details the results of the home dialysis visits.

# of Facilities Patient	# of Patients	# of Patients	# of Patients at the	# of Patients at the
Advocates Lead Education	that Patient	Expressed	Start of the QIA in a	End of the QIA in a
Lobby Days	Advocates	Interest after the	Home Modality from	Home Modality from
	Spoke with	Initial Patient	the facilities with	the facilities with
		Advocates	Patient Advocate	Patient Advocate
		Interactions	Intervention	Intervention
10 Home Dialysis Focus	109	39	7	72

Network 4 Patient Advocates' Intervention Results:

Other promising practices included using various staff members to provide one-to-one education, the use of QIRN4-developed education resources such as the "Why Should I Choose Home" poster and brochure for education, and dialysis providers embracing the transitional care model.

from

Identified Barriers: Top barriers for getting patients to change to a home modality included patients' satisfaction with in-center hemodialysis, patient refusal, and lack of home support system



Figure 17 – Percent of Patients Starting Home Dialysis, Network 4 and National Target Facilities

Population Health Focus Pilot Project Quality Improvement Activity

Background

QIRN4 identified and worked with 10% of dialysis facilities (34) within the Network 4 service area. Facilities were selected from the bottom 25% of Network facilities based on vocational rehabilitation (VR) data extracted from CROWNWeb and delivered by the National Coordinating Center (NCC).

Goals and Outcomes

The goals set forth by the Centers for Medicare and Medicaid Services (CMS) for the Population Health Focus Pilot (PHFP) Quality Improvement Activity (QIA) were to increase from baseline, by at least 10%, the number of patients referred to VR or employment network (EN) services and increase by 5% the utilization of VR/EN services. QIRN4 encouraged enrolled facilities to work towards "stretch goals"—20 and 10 percentage points respectively. In addition to the referral and utilization goals, there was a 100% screening goal in which all prevalent eligible patients were to be screened for their interest in VR/EN services. All participating facilities achieved the goal of screening 100% of eligible patients in 2019. The Statement of Work (SOW) defined eligible patients as those between the ages of 18 and 54 who were not employed, a student, or receiving VR/EN services at the time of screening.

Barriers

The most frequently cited barriers were fear of worsening illness, patients and staff lack of awareness of VR/EN services, fear of losing benefits, and lack of process in place for screening, referrals, follow-up and documenting processes.

Interventions and Best Practices

Network-level interventions were developed in large part in response to the root causes of low referral and underutilization of services as identified by the facilities' root cause analysis (RCA), as well as from literature and the experiences and lessons learned from QIRN4's patient liaisons and the previous year's VR QIA. The six attributes outlined by CMS were incorporated into the interventions. The most successful interventions identified as best practices included:

• Innovation in Action

- Monthly distribution of individual facility performance on VR metrics compared to 2019 CMS goals and stretch goals
- Targeted Take Action Reports (TARs) that offered deep dive facility-level reports for facilities struggling to demonstrate incremental progress on one or more VR metric from month-to-month
- o Project toolkit that includes local, state, and Ticket to Work resources

• Rapid Cycle Improvement in Action

- Onsite and 1:1 calls with focus facilities to perform RCA to identify facility-level barriers to VR/EN services
- o Internal "stoplight" dashboards to track facility-level and aggregate performance
- Technical assistance provided via 1:1 coaching calls and during QIRN4-hosted webinars to address process and outcome barriers

• Boundarilessness and Teamwork in Action

- Partnered with local and regional VR/EN offices in PA and DE to facilitate training and education at facility Lobby Days and educational events for patients
- Actively solicited feedback from the VR/EN agencies that serve the QIRN4 patient population to improve communication and services to the Network facilities
- Required focus facility attendance and participation on all NCC Learning Action Network (LAN) calls and distributed recordings and slides to focus facilities via email and Network VR webpage

• Patient and Family Engagement in Action

- Adapted patient questionnaire to elicit patient feedback on project interventions, patient eligibility for VR, and interest and readiness for VR/EN services
- Solicited patient "success stories" from Social Workers and Patient Liaisons in effort to promote successful experiences with VR/EN
- Encouraged the inclusion of patient representatives to serve as peer mentors and provide input into the development of facility-level interventions

• Customer Focus in Action

- o Provided monthly 1:1 coaching to focus facilities in need of assistance
- Distributed CROWNWeb Job Aide to provide guidance to facilities on how to appropriately document VR status
- o Provided patient questionnaire to determine eligibility, interest, and readiness

• Sustainability

- Assisted facilities in establishing and sustaining processes for identifying eligible patients, referring patients to services, following up with referred patients, and documenting facility efforts and patients' VR status in reporting databases
- Increased focus facility staff knowledge of available VR/EN services and the ways in which to assist patients with self-referral and obtaining VR/EN services
- Developed and distributed a formatted sustainability action plan to guide facilities' plan for integration, sustainability, and scale/spread of plan



Figure 19 - Percent of Patients Receiving Services, Network 4 and National Target Facilities



Source of data: ESRD NCC 2019 Dashboard accessed October 2019

ESRD NETWORK RECOMMENDATIONS



Facilities that Consistently Failed to Cooperate with Network Goals

All facilities in the Network 4 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 2019.

Recommendations to CMS for Additional Services or Facilities

We did not recommend any additional services or facilities in 2019. The facilities and services available to patients in the Network 4 geographic area are well distributed and are readily accessible to patients.

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION



ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION

There were no significant emergencies or disasters in the Network 4 geographic area in 2019.

QIRN4 invited dialysis facility staff to participate in the national emergency preparedness tabletop exercise conducted by the Kidney Community Emergency Response (KCER) group on November 7. A total of 17 facility staff attended this exercise with QIRN4, and found the dialogue and opportunity to build relationships to be beneficial to their emergency preparedness activities.

ACRONYM LIST APPENDIX

This appendix contains a link to a list of acronyms created by the KPAC (Kidney Patient Advisory Council) of the National Forum of ESRD Networks. We are grateful to the KPAC for creating this list of acronyms to assist patients and stakeholders in the readability of this annual report. We appreciate the collaboration of the National Forum of ESRD Networks, especially the KPAC. <u>http://esrdnetworks.org/education/acronym-glossary/view</u>

Additional Acronym and Glossary Resources

Fresenius Glossary https://www.freseniuskidneycare.com/glossary National Center for Biotechnology Information Acronyms and Abbreviations http://www.ncbi.nlm.nih.gov/books/NBK84563/ Renal Support Network http://www.rsnhope.org/programs/kidneytimes-library/article-index/renal-acronyms