ESRD NETWORK 2018 ANNUAL REPORT

ESRD Network 04

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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. Quality Insights holds 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: the Mid-Atlantic Renal Coalition (MARC), Quality Insights Renal Network 3 (QIRN3), and Quality Insights Renal Network 4 (QIRN4).

By pooling common administrative services such as information technology (IT), human resources (HR), communications, data/analytic services, and financial services, Quality Insights provides QIRN4 efficient centralized support, which allows local staff to be highly engaged and collaborative who have developed trusted relationships with Network area health care provider communities and consumer organizations.

Geographic Description

QIRN4 is responsible for two neighboring states, Pennsylvania and Delaware, which are located in the Northeast United States. The states, although in close proximity, vary in size, population, concentration of ESRD providers, as well as geographic characteristics.

Pennsylvania is made up of 67 counties that cover 44,827 square miles. As of December 31, 2018, a total of 18,822 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 318 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, 2018, a total of 1,752 patients were receiving dialysis services in the state of Delaware. Those who were treated at an in-center hemodialysis center did so at one of 31 Medicare-approved dialysis centers or at one non-Medicare-approved Veterans Affairs Medical Center (VAMC) unit.

As shown in Figure 1, as of December 31, 2018, there were 18,261 patients receiving treatment in dialysis facilities in the Network 4 service area, and an additional 2,294 patients receiving treatment in their homes. This total of 20,574 patients receiving dialysis, plus an additional 12,444 patients living with a functioning kidney transplant in the Network 3 service area brings the total ESRD patient count for this area to 33,018. The number of ESRD facilities in the Network 4 service area, by treatment modalities offered, is shown in Figure 2. As of December 31, 2018 there were

20 transplant centers, 222 dialysis centers offering both in-center dialysis and home dialysis support, 125 dialysis centers offering in-center dialysis only, and 2 dialysis centers offering home dialysis support only, for a total of 349 dialysis centers and 369 centers that support ESRD patients.

Figures 3 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, 2018 by Treatment Modality

Figure 2 -Number of Facilities in the Network 4 Service Area by Modality Offered as of 12/31/2018





Figure 3 - Percent of Dialysis Patients in each Network Service Area as of 12/31/2018

Figure 4 - Percent of National Total Dialysis Facilities Located in Each Network Service Area as of 12/31/2018





Figure 5 - Percent of National Home Dialysis Patient Population Treated in Each Network Service Area as of 12/31/2018

Figure 6 - Percent of National Transplant Patient Population in Each Network Service Area as of 12/31/2018





Figure 7 - Percent of National Total Transplant Centers in Each Network Service Area as of 12/31/2018



ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

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 29 calls during which we could provide immediate advocacy in 2018. These cases included treatment related/quality of care issues, staff related issues, and physical environment concerns.

We also investigated six Clinical Quality of Care cases filed by patients in 2018. 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 2018 we had 39 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 intervention early on helps the facility staff find alternatives that help reduce the need for discharges. In 2018, we fielded 61 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. As evidenced by the relatively low number of IVD/IVT cases in 2018, these interventions have been successful in maintaining at-risk patients in their facilities.



Figure 8 - Types of Grievances and Non-Grievances Received by QIRN4 in 2018

Source of data: Patient Contact Utility (PCU)



ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA

Long Term Catheter Quality Improvement Activity

Goal: Assist 41 Facilities in the BSI QIA with greater than 15% of their patients receiving dialysis through a catheter for more than 90 consecutive days (called long term catheters or LTC) to reduce that rate by 2 percentage points by September 30, 2018

Results: As shown in Figure 9, QIRN4 exceeded the stated goal by achieving an aggregate LTC rate of 17.47% in the targeted facilities

Interventions

- Assisted facilities with development of quality improvement (QI) plans to address their self-identified main barrier to LTC reduction
- Reviewed QI plans and provided feedback to improve the plans. We provided more intense focus and discussions with facilities whose main barrier was patient refusals and/or extended maturation time
- 1:1 coaching calls to 12 facilities that had also been in a 2017 project
- Distribution of Fistula First Catheter Last reports to all levels of facility leadership.
- Webinar: Strategies for Fistula Maturation & Salvage
- NCC Peer Mentorship Program facilities were expected to identify a patient willing to complete this program and use the skills to communicate with patients with LTCs to consider alternative dialysis methods. Sixteen facilities identified patients.
- Why Should I Choose Home? Poster: facilities were encouraged to use this resource for promoting LTC reduction during home therapy lobby days.

Identified Best Practices

- We provided a Kickoff WebEx specific to LTC focus group requirements 68% of 41 respondents found this strategy to be "Useful"
- Of the best practices identified during national provider calls, the three practices with the highest level of adoption by the clinics were:
 - New implementation of CDC Dialysis Station Cleaning audits (34%, 36/107 respondents)
 - Catheter Care Team communication: verbal or written reports for nursing homes or long term acute care education (21%, 22/107 respondents)
 - Initiate use of oral and/or written report for transition of care between dialysis units and hospitals (aka handoff)

Identified Barriers

- Patient refusal
- Medical condition unsuitable or exhausted access sites
- Limited availability of surgeons
- Extended maturation times



• Figure 9 - LTC Rates for Network 4 and National Targeted Dialysis Facilities

Bloodstream 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 2017) by the end of June 2018.

Results: As shown in Figure 10, at the conclusion of this project, the facilities in this project exceeded the goal by experiencing 136 fewer infections, compared to a goal of 54 fewer infections. Additionally, as show in Figure 11, by September 30, 92.9% 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%. To assist the CDC's efforts in capturing all BSIs that occur in dialysis patients, 20.4% of dialysis facilities in this project had gained access to a hospital electronic medical record (EMR) or to a regional or national health information exchange (HIE), as shown in Figure 12. The CDC believes that this access will allow dialysis facilities to capture infections that are identified during a hospitalization and report them to NHSN.

Interventions

- Use of CDC BSI Prevention protocols and audits for hand hygiene (HH), catheter connection/disconnection, Scrub the Hub and CDC patient education.
- Use of the Institute for Healthcare (IHI) Model for Improvement Plan-Do-Study-Act (PDSA) cycle(s) to test change, including the use of root cause analysis (RCA)
- Documentation of monthly patient engagement in BSI prevention activities at the facility; patients performing the hand hygiene audits or clinic managers obtaining observations of staff performance of hand hygiene through direct questioning of the patients. The targeted question approach was readily received by managers, who identified patients to perform the audits.

Identified Best Practices

- Provided feedback and coaching to facilities 66% of 107 found our feedback and coaching "valuable"
- We provided a CDC Core Interventions Self-Assessment tool, which was developed in collaboration with Network 3, to evaluate the clinic's baseline status of implementation of the 9 Core Interventions– 69% found this tool "useful"
- ICAR Assessments In option year 1, the Philadelphia Department of Public Health (PDPH) performed Infection Control Assessment & Response surveys of clinics within the city limits. In option year 2, we partnered with PA DOH Epidemiology Department to conduct ICARs in Central PA while continuing our partnership with the PDPH. In total, 15 clinics received an ICAR. Six of seven facilities surveyed stated the experience was very valuable.
- Use of a patient recruitment letter written in collaboration with patient SMEs to inform patients of their clinic's participation in the BSI Reduction QIA, how important their participation was for successfully preventing BSIs, and how they could participate in the project.

Identified Barriers

- Corporate policy(ies) do not permit the use of antimicrobial ointment with each CVC dressing change.
- Facility resistance to patients participating in their quality improvement team meetings



Figure 10 - Number of BSIs to be Reduced Compared to Total Reduced in Network 4 Target Facilities



Figure 11 - Percent of Facilities in the Network 4 Service Area That Had One Staff Person Complete NHSN Training



Figure 12 - Percent of Focus Facilities with Access to a Hospital's Electronic Medical Record (EMR) or a Regional or National Health Information Exchange (HIE)

Transplant Waitlist Quality Improvement Activity

Goal of QIA: Enlist 30% (100 participating facilities; 6,450 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 10 percentage point increase in the rate of eligible patients placed on the transplant waitlist by the end of September 2018.

Results: As shown in Figure 13, at the conclusion of the project, the overall kidney transplant waitlist rate remained flat. There were numerous barriers outside of the providers' control that contributed to the flat rate.

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, QIRN 4 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.

Identified Best Practices: Utilizing the Pareto Principle, where 80 percent of the consequences come from 20 percent of the causes, we encouraged providers to focus interventions on their top barriers. Providers reported incorporating transplant education in the in-center dialysis routine. The most prominent education intervention reported by the facilities was holding transplant education "lobby days." In addition to education through "lobby days," a number of facilities reported using various avenues to provide transplant education as shown in the table below.

Strategy	Success reported by facilities – quotes from facility staff
One-to-one education by	Patients benefit from frequent contacts regarding progress updates
the social workers	• More timely interactions with patients and transplant team allowed LSW to address
	potential barriers and assist as needed
	Another patient was added to the list
Patient Advocates identified by Network visit facilities	 More patients are proactively following up with their transplant programs subsequent to having the Network involved in transplant educational lobby days.
and provide education	• A patient who had told me today she would never do a transplant after having liver
	transplant said she now wants it. She shared your demeanor and ability to communicate
	with her helped. She said after going home that day your words kept ringing in her ears
	and she figured, why not! She is excited! Thanks again for your expertise, care, and
	concerns.
Nephrologists/Nurse	 Having the doctors speak with the patients, may make a difference
Practitioners provide	 Provided two patients with transplant contacts
education during monthly	• Candidate(s), when properly motivated, will follow through with requested testing in
rounds	order to be active on the transplant list; this was evidenced by an eligible candidate
	making appointments and having testing completed. This candidate now has an
	appointment with the transplant evaluation team.

Other Avenues of Providing Patient Education:

Identified Barriers:

Top barriers for getting patients on the transplant waitlist included patient refusal, the burdensome process of transplant evaluation and long wait for a transplant, lack of follow up with appointments, and educational knowledge gap for both facility staff and patients.



Figure 13 - Percent of Patients on Transplant Waitlist, Network 4 and National Target Facilities

Home Therapy Quality Improvement Activity

Goal of QIA: Enroll 30% (100 participating facilities; 6,500 patients) of dialysis facilities in the Network 4 service area to achieve a 10 percentage point increase in eligible patients in training for a home modality by the end of September 2018.

Results: As shown in Figure 14, although we did not meet the 10 percentage improvement, there was a steady increase in the overall percentage of patients who were trained for home dialysis throughout the project period.

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 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

QIRN 4 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 prominent education interventions reported by the facilities was utilizing Kidney Care Advocates (specialized educators). In addition to the Kidney Care Advocates involvement in providing education, a number of facilities reported using various other avenues to provide home dialysis education.

Strategy	Success reported by facilities (quotes from facility staff)
One-to-one education by the in-center nursing staff and/or social workers	 It got the patients thinking about it One-to-one discussion works best with our clinic Involvement with staff and face-to-face helps to address all issues/questions
Network Patient Advocates directly involve in providing education	 One patient has been on the fence about PD, now stated he will do it after speaking with the patient advocate. We have two patients showing interest
Home therapy nurse directly involve in providing education	 We have partnered with the home therapies team to introduce the patients to home therapy by holding a week session of "Experience the Difference" with one patient in the unit
Staff education Focus	 We learned that patients can now go on home hemodialysis without a partner if approved by the medical director We started providing in-service for our staff. We are successful with staff interest and engagement and will follow up with patient lobby days to spark interest

Other Avenues for Providing Patient Education

Identified Barriers:

Top barriers for getting patients trained for home dialysis included educational knowledge gap in facility staff and patients about home dialysis, patients' lack of home support, refusal, patients not wanting responsibility of dialyzing at home.



Figure 14 - Percent of Patients Training for Home Dialysis, Network 4 and National Target Facilities

Population Health Focus Pilot Project Quality Improvement Activity

Goal of QIA: Assist 10% (34) of the In Center Hemodialysis (ICH) facilities in Network 4's service area to demonstrate at least a 5 percentage point increase in the number of ESRD patients who are referred to Vocational Rehabilitation (VR) or Employment Network (EN) agencies AND demonstrate at least a 2 percentage point increase in the number of ESRD patients who are using VR or EN services by the end of the third quarter of 2018.

Results: As shown in Figure 15, at the conclusion of the project, the overall VR/EN referral rate for the participating facilities improved from a baseline of 4.39% to 32.84% of patients referred for services (increase of 28.45 percentage points); the overall VR/EN utilization rate for the participating facilities improved from a baseline of 1.20% to 5.88% (Figure 16) of patients receiving services (increase of 4.68 percentage points). Both measures exceeded the identified CMS goals.

Interventions:

We created and conducted facility-specific kick off webinars for each of the selected facilities that explained the project background and the improvement goals. Each facility received a project specific "toolkit" that contained improvement concepts from the Institute for Healthcare Improvement (IHI) Model for Improvement along with quality improvement tools such as Plan-Do-Study-Act cycle templates, root cause analysis templates, and systems process mapping tools to assist in improvement efforts. Throughout the project, we provided coaching and technical support, ongoing education opportunities, and guidance. We also provided each facility with patient-level reports for targeted VR/EN education. We provided feedback reports to assist the update of patient VR/EN status in CROWNWeb.

Attributes in Action

Rapid Cycle Improvement: Dialysis staff completed root cause analysis (RCA) and identified barrier(s) for referring patients for VR/EN services as well as patient using VR/EN services. Providers were then expected to carry out interventions targeting the identified barriers. We developed and disseminated a template for providers to document the PDSA cycles to test and evaluate the effectiveness of their interventions.

Patient and Family Engagement

We worked with patient subject matter experts (PSMEs) during the development, implementation, and evaluation of this project. The PSMEs assisted in developing the educational flyers and facility posters that helped to address general VR/EN education for fellow dialysis patients and providers.

Customer Focus: We worked closely with the focus facilities and provided technical assistance to teach them how to perform a RCA, developing interventions to remove identified barriers and updating CROWNWeb with patients' activities. We interacted with state VR/EN agencies to improve communication between the facilities and VR/EN staff. We created an "end user friendly" on-line reporting tool for all facilities to quickly report monthly improvement activities. **Innovation:** We joined with Network 3 and Network 5 to conduct an Innovation Challenge for all facilities in this project. A semifinal winner from each Network was chosen by the PSMEs and facility staff. The overall grand winner (overall winner among all three Networks) was chosen by all of the participating facilities from the three Networks. The goal of this challenge was to identify and share innovative interventions that could be adapted by all facilities in this project.

Boundarilessness and Unconditional Teamwork: We committed to engaging multiple VR/EN entities, Networks, patients, and other stakeholders to share improvement activities for this project

Sustainability: Sharing and implementing best practices and sharing ideas from the innovation challenge were methods we used to insure improvement sustainability

Identified Best Practices

- Use of a "team" approach including all staff and the use of team huddles or QIA meetings to discuss each patient's referral and utilization status and resolve any patient-identified barriers
- Using Process Mapping of VR/EN referral and follow up process and CROWNWeb VR/EN documentation process as a way to identify specific gaps and areas of improvement
- Develop a regular ongoing communication process between the social worker and the CROWNWeb administrator so regular VR/EN status updates could be made

Identified Barriers

The biggest barriers were patients' fear of losing Social Security benefits if employed, patients' fear of getting sick if they over-extended themselves by seeking employment, medical and behavioral health contraindications, patient refusals/not interested, and lack of transportation to the VR agency and employment.



Figure 15 - Percent of Patients Referred for Services, Network 4 and National Target Facilities



Figure 16 - Percent of Patients Receiving Services, Network 4 and National Target Facilities



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 2018.

Recommendations to CMS for Additional Services or Facilities

We did not recommend any additional services or facilities in 2018. 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

There were no significant emergencies in the Network 4 geographic area in 2018.

ACRONYM LIST APPENDIX

This appendix contains a link (<u>http://esrdnetworks.org/education/acronym-glossary/view</u>) 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.

Additional Acronym and Glossary Resources

Baxter Renal Glossary of Terms Associated with Kidney Disease http://www.renalinfo.com/us/resources/glossary/index.html NKF Glossary of Terms http://www.nkfi.org/education/glossary-of-terms#.VXByf2fbKUk FMC Glossary http://www.ultracare-dialysis.com/Footer/Glossary.aspx 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/