

ESRD Network 8

2022 Annual Report

This report will cover quality improvement efforts led by ESRD Network 8 from Base Period of Task Order Number 75FCMC21F0001 from May 1, 2022- April 30, 2023.

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ESRD Demographic Data

The End-Stage Renal Disease (ESRD) Network 8 contract is held by Alliant Health Solutions (AHS), as is the ESRD Network 14 contract. AHS is a Network of Quality Improvement and Innovation Contractor (NQIIC) under contract with the Center for Medicare & Medicaid Services (CMS) for quality improvement services. AHS provides federal and state government entities with the services, expertise, and information systems necessary to increase the effectiveness, accessibility, and value of health care. AHS is also the division that manages Quality Innovation Network-Quality Improvement Organization (QIN-QIO) and Hospital Quality Improvement Contractor (HQIC) work. As a leading provider of innovative health solutions, AHS' services include utilization management, program integrity, and quality improvement while being clinically led, technology-driven, and customer-focused. The two ESRD Networks rely on the corporate partnership for daily administrative, human resources, and data and information technology services. This partnership facilitates rich collaboration and increased efficiencies for the Networks' quality improvement, patient engagement, and emergency management activities.

ESRD Network 8 serves dialysis and transplant patients and providers in Alabama, Mississippi, and Tennessee, with the administrative office in Ridgeland, Mississippi. Administrative guidance is received from the Alliant Board of Directors, program oversight from the Medical Review Board (MRB), and project development advice and consultation from a diverse group of patient subject matter experts (SMEs) who form the Patient Advisory Council (PAC) and ESRD professionals who serve on the Network Council.

Geography and General Population

The Network service area has a general population of approximately 15.1 million. Alabama and Mississippi share geographic, climate, population, and cultural similarities, while their neighbor to the north, Tennessee, has more topographic and demographic diversity and shares boundaries with eight states. Mississippi is the most rural of the three states, followed by Alabama and Tennessee.

ESRD Population

In 2022, six new Medicare-certified dialysis facilities opened in the Network service area, and 14 Medicare-certified dialysis facilities closed, bringing the total number of facilities to 494 (Chart 3). Approximately 88% of the dialysis facilities in Network 8 are managed by large dialysis organizations (LDO), while small dialysis organizations or independent organizations manage the remaining 12%.

As of December 31, 2022, data shows that Network 8 served 23,224 in-center patients and 4,392 home patients who received renal replacement therapy from one of the 494 dialysis units (Chart 1). An additional 12,376 kidney transplant patients received care at one of 10 transplant units, bringing the total Network 8 ESRD population to 39,992. By modality type, 58% of ESRD patients received in-center dialysis, 11% dialyzed at home, and 31% had a kidney transplant. As of December 31, 2022, 35% of Network 8 patients received dialysis services in Alabama, 26% in Mississippi, and 39% in Tennessee.



Chart 1: Count of Prevalent ESRD Patients by Treatment Setting

Chart 2: Count of Incident ESRD Patients by Initial Treatment Setting





Chart 3: Count of Medicare-Certified Facilities by Treatment Setting

Chart 4: Percent of National Prevalent Dialysis Patients by ESRD Network





Chart 5: Percent of National Incident Dialysis Patients by ESRD Network



Chart 6: Percent of Medicare-Certified Dialysis Facilities by ESRD Network

Chart 7: Percent of National Home Hemodialysis and Peritoneal Dialysis





Chart 8: Percent of National Transplant Patients by ESRD Network

Chart 9: Percent of Medicare-Certified Kidney Transplant Facilities





ESRD Network Grievance and Access to Care Data

Network 8 responded to grievances filed by or on behalf of ESRD patients within the Network service area. For each grievance filed, the Network conducted outreach to patients and providers to promote education about the Network's role in addressing patient grievances. Opportunities to educate clinics and to advocate for patients with Health Equity issues were presented in each case. The following is a summary of case numbers as of April 30, 2023:

- Immediate Advocacy: 9
- General Grievance: 16
- Clinical Quality of Care: 4

Patient Services interviewed and screened patients during initial intake to determine if there were health literacy issues, issues of discrimination, and resource barriers. When permitted, Network staff mediated concerns with the patient and clinic. The Network provided suggestions for resources and ways to communicate effectively with health literacy issues and provided services to staff on issues related to effective communication with patients. The Network also collaborated with patients to promote self-advocacy through better communication.

The Network developed an in-service for all clinic members to better work with patients with Low English Proficiency (LEP). Grievance calls and facility calls were often directly linked to health inequities experienced by patients, leading to a sense of discrimination. Clinics were educated on those contributing factors and directed to work in the best interest of the patients.

In September 2022, the Network conducted an internal PDSA and implemented an internal performance improvement plan to ensure all cases were processed and closed in a timely manner. Additionally, beneficiary and facility outreach activities were monitored to ensure that effective, measurable strategies were employed to improve beneficiary and staff satisfaction with the Network's role in the grievance resolution.

Access to Care

All dialysis facilities in Network 8's service area were advised to notify the Network before providing a patient with a 30-day notice of Involuntary Discharge (IVD), and efforts were made to avert discharge during the initial phone call with facility staff. The initial phone call consisted of a review of facility interventions to improve the behavior and develop a detailed action plan. Proactively, the Network-developed "Safety First" patient education flyer was provided to all units to serve as a teaching tool to address common statements and threats made that could lead to IVD.

To ensure that Patient Services staff assessed health inequities when working with clinics, a facility call screening tool was developed requiring that five additional questions be asked of the clinic regarding health inequities that the patient could be facing. Proper identification of health equity issues and addressing those barriers led to 38 patients at risk for IVD, classified as Access to Care (A2C) concerns, remaining in the clinic with IVD averted. The overall IVD cases were significantly lower during the 2022-2023 contract (option period one), with 28 recorded cases

compared to 40 IVDs recorded during the 2021-2022 base contract period. Additionally, there were four more averted IVDs during option period one.

Cases are summarized as follows; averted and IVD cases do not equal total A2C cases, as some cases may be immediately classified as IVD/IVT due to the nature of the event:

- Access to Care (at risk for IVD / request for placement): 50
- Averted IVDs: 38
- IVD/IVT: 28

Chart 10: Percent of May 2022-Apr 2023 Grievances and Non-Grievances by Case Type

Source of data: EQRS Patient Contact Utility (PCU)





Transplant Waitlist & Transplanted May 2022-April 2023

The Network worked towards the goal of empowering the patient choice of transplant by implementing interventions and process improvements to improve the rate of patients added to the transplant waitlist and receiving a kidney transplant. The Network aimed to achieve a 5% increase in the number of patients added to the kidney transplant waitlist and a 6% increase in the number of prevalent patients receiving a kidney transplant.

The Network-led transplant community coalition—consisting of subject matter experts (SMEs) from transplant centers, organ procurement organizations (OPOs), patients, and dialysis facilities—identified common barriers and brainstormed possible solutions that were then utilized during one-on-one technical assistance with facilities to improve transplantation rates. With the feedback obtained by members, the Network developed and implemented a Transplant Improvement Plan with three plan, do, study, act (PDSA) groups composed of 88 low to middle-performing facilities with the capacity to improve waitlisting and transplantation rates during the four-month cycles. Monthly interventions, activities, root cause analysis (RCA), and monthly check-ins were included in the Transplant Improvement Plan and the Transplant Improvement Dashboard for accessibility. The Transplant Improvement Plan included the implementation of the primary drivers from the ESRD National Coordinating Center (NCC) Transplant Change Package, monthly goals and targeted different phases of the transplant process. The monthly focus included: "Introduce and Identify," "Educate and Empower," "Commit and Follow Through," and "Listed or Transplanted."

Commonly identified root causes included:

- Patient lack of follow-up, such as missing appointments without rescheduling or being unresponsive to transplant center phone calls.
- Lack of communication between transplant centers, dialysis facilities and patients
- Patient lack of understanding of the transplant process
- Lack of motivation or interest

Other important barriers included:

- Transportation
- Comorbidities
- Financial cost

The Network provided targeted, specific interventions to dialysis facilities utilizing feedback from one-on-one technical assistance and feedback from the transplant community coalition and advisory committee.

Interventions and processes changes/enhancements implemented:

- Establishing a transplant improvement team to include a transplant champion for a teambased approach
- Identifying a small group of eligible patients to concentrate on moving toward the waitlist or transplantation
- Promoting consistent and continuous chairside education with the implementation of the teach-back method by members of the facility improvement team. Additional educational resources were easily accessible to facilities via the Transplant Improvement Dashboard.
- Promoting continuous monthly follow-up by the facility's improvement team for patient's transplant progress or status
- Utilization and promotion of the Network's Kidney Transplant Checklist
- Identifying and utilization of transplant trailblazers to share their transplant experience and journey with their peers
- Promotion of transplant lobby days within dialysis facilities
- Utilization of transplant bulletin boards in dialysis facilities to promote transplantation and patient engagement
- Utilization of the Transplant Change Package

Identified best practices included:

- The Network Kidney Transplant Checklist was recognized by the National Forum of ESRD Networks as a Highly Effective Practice.
- The Network Kidney Transplant Checklist streamlined the process for patients who do not understand the transplant process, helping visual learners see their progress on paper.
- The Network functioned as a liaison to bridge the gap of communication between dialysis centers and transplant centers.
- "How to Avoid Transplant Waitlisting Delays" was developed by the transplant community coalition to further assist patients with understanding the importance of timely completion of required health maintenance exams.
- Utilization of a transplant trailblazer increased patients' interest in a kidney transplant and the facility's transplant referrals.

In summary, the Network successfully surpassed both a 5% increase in patients added to the kidney transplant waitlist and a 6% increase in prevalent patients receiving a kidney transplant. A total of 1,556 Network 8 ESRD patients were added to the kidney transplant waitlist, and 1,020 Network 8 ESRD prevalent patients received a kidney transplant during the performance period. In addition to the 1,020 prevalent transplants performed, 213 preemptive Network 8 ESRD patients received a kidney transplant, according to the National Coordinating Center (NCC) Network Patient Reports, Period Prevalence table from May 2023. The Network will continue collaborating with providers, patients, and other stakeholders to increase waitlisting and kidney transplantation.

Chart 11: Count of Patients Added to a Kidney Transplant Waiting List May 2022-April 2023







Home Therapy May 2022-April 2023

Network 8 worked to achieve a 20% increase in the rate of incident patients (defined as the first New to ESRD treatment) using a home modality and achieved an 18.7% increase, adding 1,360 incident patients to a home modality. The Network also sought to achieve a 6% increase in the rate of prevalent patients transitioning to a home modality and achieved a 5.2% increase, adding 1,314 prevalent patients to a home modality.

A home community coalition, consisting of high-performing providers and patient subject matter experts, was established by the Network to identify barriers and potential solutions to assist low-performing facilities in improving home dialysis rates. Using a 4-month plan, do, study, act (PDSA) cycle, the Network utilized coalition feedback to provide targeted technical assistance and share best practices to drive process improvements for three groups of intervention facilities.

Facility-specific monthly interventions included an initial RCA, monthly resources and a monthly progress check-in. Interventions focused on various aspects of home modality education and promoted specific primary drivers from the ESRD National Coordinating Center (NCC) Home Dialysis Change Package. Process changes promoted in the improvement plan included:

- Establishing a home improvement team for a team-based education approach
- Selecting a small group of eligible patients to focus on for four months.
- Identifying patient-specific life plan goals and exploring the benefits of home dialysis in this context
- Providing consistent chairside education and continuous follow-up by different facility staff
- Implementing self-care dialysis in-center to ease the transition to home training.
- Conducting roster reviews and routine data checks to ensure correct reporting of patient modality in EQRS

A total of 240 facilities, categorized as low to middle performers with the capacity to improve, participated in this quality improvement activity. Commonly identified barriers included:

- Difficulties reaching and collaborating with CKD providers and patients
- Lack of physician knowledge and comfort with solo-home hemodialysis, urgent-start peritoneal dialysis, and transitional care units
- Patients favor in-center settings for socialization and a sense of security associated with the provision of treatment by dialysis professionals
- Patients' lack of care partner, family support, or inadequate housing

One-on-one technical assistance was provided to facilities individualized to their specific barriers and concerns. Network mitigation efforts included:

- Encouraging facilities to use a Kidney Care Advocate, Kidney Smart educator or Home Hero to promote early home modality education
- Interacting with facilities that did not offer solo home hemodialysis and providing education and webinars to highlight advantages, promoting this as a best practice for patients without a care partner and for whom PD was not an option.

- Sharing educational webinars regarding Urgent Start Peritoneal Dialysis and Transitional Care Units with providers
- Promoting home modality videos, lobby days, and chairside education to educate patients on the socialization aspects of home dialysis as well as the 24-hour availability of dialysis staff if needed
- Encouraging lobby days to demonstrate home modalities and provide an opportunity for home dialysis patients to share their experience with incenter patients
- Highlighting the Network developed the "Benefits of Home" series to highlight the advantages of dialyzing at home
- Promoting self-care for in-center patients to master basic skills and build self-confidence before initiation of home training

By partnering with high-performing facilities to learn best practices while providing targeted technical assistance and spreading best practices, a total of 2,674 patients started or moved to a home modality. Also of note, the percentage of dialysis patients initially starting on a home modality increased from 17.05% in 2021 to 19.50% in 2022.

Chart 13: Count of Incident Patients Starting Dialysis using a Home Modality May 2022-April 2023



Chart 14: Count of Prevalent Patients Moving to a Home Modality May 2022-April 2023



Influenza Vaccinations (Patient and Staff) May 2022-April 2023

Network 8 was tasked to meet the following influenza vaccination goals by the end of option period one:

- 90% of dialysis patients receive an influenza vaccination.
- 90% of dialysis staff received an influenza vaccination.

Intervention facilities completed four-month PDSA cycles that included an RCA to identify areas of needed technical assistance.

Commonly identified root causes included:

- Vaccination fatigue
- Allergies
- Refusal of all vaccines
- Lack of trust
- Fear
- Required mask protocol during treatment.
- Political beliefs
- Religious beliefs
- Inaccurate data in EQRS/National Healthcare Safety Network (NHSN)
- Lack of reporting in NHSN
- Unaware of vaccination rates in EQRS

Based on identified root causes and facility-specific feedback, the Network provided targeted technical assistance to facilities.

Interventions implemented included:

- Individualized coaching calls to review patient-specific data and discrepancies in data reporting
- Provision of training on the new EQRS Vaccination Module
- Incorporation of patient engagement activities to provide fun, interactive vaccination education.
- Utilization of the Vaccination Change Package
- Utilization of the Immunization Data Collection Tool from the National Forum of ESRD Networks' Vaccination Toolkit
- Provision of monthly education to address vaccination hesitancy and common vaccination misconceptions
- Assistance with obtaining EQRS access
- Assistance with obtaining access to NHSN's Healthcare Personnel Safety component
- Provision of training on how to enter staff vaccination data into NHSN
- Assistance with identifying and troubleshooting batch submission errors to the new EQRS Vaccination Module
- Monthly sharing of influenza vaccination rates to provide awareness and trend progress

Process changes implemented by QIA facilities included:

- Utilization of State Immunization Registries
- Implementation of Vaccination Manager to track/trend vaccines
- Development of a vaccination binder to assist with tracking
- Involvement of the entire interdisciplinary team
- Development of an immunization bulletin board
- Incorporation of visual aids to assist with education
- Improved communication with other health care providers to determine vaccination statuses

In addition to the facility-specific interventions above, the Network partnered with the following coalitions: National COVID-19 Resiliency Network (NCRN) Regional Community Coalition, Texas Medical Foundation (TMF) Health Quality Institute Partnership for Community Health, TMF Mississippi Partnerships for Community Health, and Tennessee Statewide Partnerships for Community Health. Coalition resources were utilized to enhance technical assistance efforts to address vaccine hesitancy.

Despite the above interventions and ongoing efforts to increase influenza vaccinations, Network 8 did not meet the patient or staff influenza vaccination goals during option period one. The Network achieved a rate of 80.60% in dialysis patient influenza vaccinations and 43.74% in dialysis staff influenza vaccinations.

Chart 15: Percent of Dialysis Patients Receiving an Influenza Vaccination May 2022-April 2023



Chart 16: Percent of Dialysis Facility Staff Receiving an Influenza Vaccination May 2022-April 2023



COVID-19 Vaccinations (Patients and Staff) May 2022-April 2023

Network 8 was tasked to meet the following COVID-19 vaccination goals by the end of option period one:

- 80% of dialysis patients receive a primary COVID-19 vaccination and/or vaccination series.
- 80% of fully vaccinated dialysis patients receive any additional COVID-19 vaccinations.
- 100% of dialysis staff receive a primary COVID-19 vaccination and/or vaccination series.
- 100% of fully vaccinated dialysis staff receive any additional COVID-19 vaccinations.

Intervention facilities completed four-month PDSA cycles that included an RCA to identify areas of needed technical assistance.

Commonly identified root causes included:

- Vaccination fatigue
- Allergies
- Refusal of all vaccines
- Lack of trust
- Fear of side effects
- Inaccurate facts/myths
- Knowledge deficit
- Political beliefs
- Religious beliefs
- Inaccurate data in NHSN
- Lack of reporting in NHSN
- Unaware of vaccination rates in NHSN

Based on identified root causes and facility-specific feedback, the Network provided targeted technical assistance to facilities.

Interventions implemented included:

- Individualized coaching calls to review and identify discrepancies in data reporting
- Incorporation of patient engagement activities to provide fun, interactive vaccination education
- Utilization of the Vaccination Change Package
- Utilization of the Immunization Data Collection Tool from the ESRD Forum's Vaccination Toolkit
- Provision of monthly education to address vaccination hesitancy and common vaccination misconceptions
- Assistance in obtaining access to NHSN's Healthcare Personnel Safety component
- Provision of training on how to enter vaccination data into NHSN
- Assistance in identifying and troubleshooting batch submission errors to NHSN
- Monthly sharing of COVID-19 vaccination rates to provide awareness and trend progress

Process changes implemented by QIA facilities included:

- Utilization of State Immunization Registries
- Implementation of Vaccination Manager to track/trend vaccines
- Incorporation of vaccination education with new patients within 30 days of admissions
- Involvement of the entire interdisciplinary team
- Improved communication with other health care providers to determine vaccination statuses
- Utilization of competitions and prizes to encourage patients to receive vaccinations
- Implementation of a vaccination clinic with a local pharmacy to provide vaccinations
- Collaboration with VaxCare to provide vaccinations

In addition to the facility-specific interventions above, the Network partnered with the following coalitions: National COVID-19 Resiliency Network (NCRN) Regional Community Coalition, Texas Medical Foundation (TMF) Health Quality Institute Partnership for Community Health, TMF Mississippi Partnerships for Community Health, and Tennessee Statewide Partnerships for Community Health. Coalition resources were utilized to enhance technical assistance efforts to address vaccine hesitancy.

Despite the above interventions and ongoing efforts to increase COVID-19 vaccinations, Network 8 did not meet the patient or staff COVID-19 vaccination goals during option period one. The Network achieved a rate of 70.60% in dialysis patient primary COVID-19 vaccinations, 62.46% in dialysis patient COVID-19 boosters, 81.86% in dialysis staff primary COVID-19 vaccinations, and 27.86% in dialysis staff COVID-19 boosters.





Chart 18: Percent of Fully Vaccinated Dialysis Patients Receiving COVID-19 Vaccination Booster May 2022-April 2023



Chart 19: Percent of Dialysis Facility Staff Receiving a Primary COVID-19 Vaccination and/or Vaccination Series May 2022-April 2023



Chart 20: Percent of Fully Vaccinated Dialysis Facility Staff Receiving COVID-19 Vaccination Booter May 2022-April 2023



Data Quality (Admissions, CMS Form 2728, CMS Form 2746) May 2022-April 2023

Network 8 focused on improving data quality for the annual performance period from May 1, 2022, through April 30, 2023. During the performance period, the Network engaged facilities and corporations in dialogue and communication surrounding the topic of data quality.

- Automatic tracking of emails in a customer relationship management tool (Salesforce) used by all Network staff at Alliant Health Solutions
- Multiple meetings with large dialysis organization corporate IT staff regarding data quality efforts
- Reporting of data quality metrics to facilities and corporations
- Updating of Transplant Activity Report (TAR) templates
- Assisting transplant facilities in obtaining access to EQRS
- Communication with corporate staff detailed for EQRS/data quality support initiatives.
- Cross-training of non-information management (IM) staff on EQRS issues, customer support, and data entry

Key areas of focus for data quality included:

- Forms and Roster verification audit
- Admissions data entered in EQRS within five days
- Timely submission of initial 2728 forms
- Timely submission of CMS 2746 forms

Network 8 conducted a roster validation and forms review on 20% of its dialysis facilities during the performance period. Facilities were selected for roster validation. Data for comparison was provided by the NCC, EQRS reports, and the corporate information technology (IT) areas of the facilities reviewed.

Form validation was performed on 20% of dialysis facilities in the Network service area. Forms validation was performed on 20% of dialysis facilities in the Network service area. This data was also provided by the NCC, EQRS reports, and the respective corporate IT areas.

Network 8 worked to achieve an increase in the submission of admission data within five days of 4.21%. Strategies to address this goal included:

- Meeting with Data Managers to establish recommendations to facilitate admission within five days
- Meeting with LDO leadership to address barriers and issues to improve admission data submission rate within five days
- Providing technical assistance for near-match tickets (168)
- Developing and deploying First Not New ESRD notifications
- Publishing educational articles in monthly professional newsletters
- Mailing Data Quality Improvement scores to facilities and associated corporations
- Developing and deploying an online ticketing system to provide customer support for admission issues, including automating response and providing resources to facilities to collect data needed to resolve admission issues.

Network 8 worked to increase the submission of initial CMS 2728 forms within 45 days of 2.63%. Actions taken to improve the submission rate of initial CMS 2728 forms from dialysis facilities included:

- Develop and send a report to all facilities of their on-time percentage and a detailed listing of CMS 2728 that comprise their on-time percentage
- Developed an Excel file for facility use to track forms
- Developed and deployed a database tool to send weekly notifications of CMS 2728 forms due within 10 days and to send daily notifications of outstanding forms
- Provided educational articles in professional newsletters
- Technical assistance with 253 CMS 2728 forms

Network 8 worked to increase the submission of CMS 2746 forms within 14 days of 4.44%. Actions taken to improve the submission rate of initial CMS 2746 forms from dialysis facilities included:

- Develop and send a report to all facilities of their on-time percentage and a detailed listing of CMS 2746 that comprise their on-time percentage
- Developed an Excel file for facility use to track forms
- Developed and deployed a database tool to send weekly notifications of CMS 2746 forms due within 10 days and to send daily notifications of outstanding forms
- Provided educational articles in professional newsletters
- Technical assistance with 31 CMS 2746 forms

Chart 21: Percent of Patient Admission Records Entered within 5 Business Days May 2022-April 2023



Chart 22: Percent of CMS-2728 Forms Submitted within 45 Days May 2022-April 2023







Hospitalization (Inpatient Admissions, ED Visits, Readmissions, and COVID-19 Admissions) May 2022-April 2023

During option period one, Network 8 worked to achieve a 5% decrease in hospital admissions, a 5% decrease in hospital 30-day unplanned readmissions, a 5% decrease in outpatient emergency department visits, and a 25% decrease in the number of COVID-19 hospitalizations in the ESRD patient population. Intervention facilities completed four-month improvement sprints with each cycle beginning with facility-specific root cause analysis and action plan development with support and targeted technical assistance from Network staff.

Commonly identified root causes included:

- Missed treatments associated with transportation challenges and not following treatment orders
- Admission to the hospital for dialysis treatments rather than directing the patient to an outpatient clinic to avoid unnecessary admission
- Failure to recognize early complications that could have been addressed more quickly at the facility level to avoid unplanned hospitalizations.

Interventions to drive improvement:

- Sharing and promoting the use of the Forum of ESRD Networks Transitions of Care Toolkit
- Sharing and promoting the use of the ESRD NCC Change Package to Reduce Hospitalizations
- Providing patients with educational resources addressing missed treatments, tips to manage thirst, dangers of fluid overload, infection prevention, medication adherence, and the importance of following a renal diet
- Ensuring patients have the correct nephrologist and facility contact information and know when to reach out
- Utilization of vaccination and zone tools
- Promotion of 5 Diamond Patient Safety Program Care Coordination and Missed Treatment Modules for staff education

Promising practices identified by participating facilities during this project included:

- Use of post-hospitalization tracking tool
- Use of designated hospitalization outcomes manager
- Use of small incentives to encourage patients to attend all treatments as scheduled.
- Encouraging patients to re-schedule missed treatments, even a partial treatment, in an attempt to prevent fluid overload/hyperkalemia
- Review hospital discharge records within a short window of time to ensure timely followup for appointments and medication changes

In addition to the facility-level interventions above, the Network continued to partner with AHS, the QIN-QIO for Alabama and Tennessee, and TMF, the QIN-QIO for Mississippi, to share information and resources. Additionally, the Network worked with individual state Departments of Health within the Network 8 region to monitor COVID-19 cases and distribute information to dialysis facilities as needed.

In summary, based on data provided by the ESRD NCC as of April 2023, the Network successfully maintained rates below the upper limit threshold established by CMS (as shown in the graphs below for all four measures). The Network will continue to partner with providers, patients, community experts, and other stakeholders to improve unplanned hospitalization while providing interventions to mitigate primary chronic comorbidities in the ESRD population.

Chart 24: Rate of ESRD-Related Hospital Admissions per 100 Patient-months May 2022-April 2023



Chart 25: Rate of Outpatient Emergency Department Visits per 100 Patientmonths May 2022-April 2023



Chart 26: Percent of Hospital 30-Day Unplanned Readmissions May 2022-April 2023



Chart 27: Count of COVID-19 Hospitalizations May 2022-April 2023



Nursing Home (Blood Transfusion, Catheter Infection, and Peritonitis) May 2022-April 2023

Network 8 was tasked with improving the quality of care for dialysis patients receiving renal replacement therapy within the skilled nursing facility (SNF)/long-term care (LTC) facility by reducing hemodialysis central line infections and peritonitis events and decreasing blood transfusions. At the outset of this quality improvement (QI) activity, there were five SNF/LTC home dialysis programs in Tennessee; two providers stopped offering this service in August 2022, and two new providers opened during this option period, leaving a net of five providers as of April 30, 2023. No dialysis programs in Alabama or Mississippi currently offer SNF/LTC home dialysis.

Networks were required to achieve a 6% decrease in the hemodialysis catheter infection rate in dialysis patients receiving home dialysis in nursing homes, a 3% decrease in peritonitis events, and a 3% decrease in the rate of dialysis patients receiving dialysis at nursing homes who also received a blood transfusion by April 30, 2023.

The following interventions were utilized to address these metrics:

- Development of a coalition of stakeholders to assist with identifying local issues and potential interventions
- Individualized coaching calls to conduct needs assessments and explain the purpose and goals of QI activity
- Provision of monthly education for infection prevention and anemia management
- Provision of monthly data updates for each metric and patient-specific case review as warranted
- Monthly collaborative meeting with the Tennessee Department of Health covering topics such as LTC facility data trends, Project Frontline educational offerings, COVID-19 outbreaks, and additional available support such as infection control assessment and response surveys
- Quarterly collaborative meeting with Alliant Health Solutions, the Tennessee QIN-QIO, to identify areas of need and brainstorm potential solutions
- Identification of facility-specific EQRS data contact with a monthly patient census review to correct data discrepancies caused by batch upload and delayed EQRS admissions

Despite the above interventions and ongoing efforts to improve the quality of SNF/LTC admission records within EQRS, Network 8 did not meet the catheter improvement goal of 0 infections (due to no infections during the baseline period), having one catheter infection reported in 118 patient months (0.85%). The Peritonitis goal was met with 0 episodes reported in 19 patient months. The transfusion goal of 10.37% was not met, with 18 transfusions reported in 137 patient months (baseline 17 transfusions in 158 patient months).

Chart 29: Rate of Blood Transfusions in ESRD Patients Receiving Dialysis in Nursing Home per 100 Patient-months May 2022-April 2023



Chart 30: Rate of Hemodialysis Catheter Infections in Home Dialysis Patients within Nursing Homes per 100 Patient-months May 2022-April 2023



Chart 31: Rate of Peritonitis Events in Home Dialysis Patients within Nursing Homes per 100 Patient-months May 2022-April 2023



Telemedicine May 2022-April 2023

The Network was tasked with achieving a 4% relative increase (756 patients) in the number of rural ESRD patients using telemedicine while dialyzing in a home setting. This goal was met with 1,103 rural home patients using telemedicine, exceeding the goal by 46%.

As part of our home dialysis QI activity, the Network conducted an RCA to determine the greatest barriers and challenges for facilities and patients in utilizing telemedicine services. The results of the RCA indicated that facilities are providing and encouraging the use of telemedicine; however, patients continue to have some barriers and lack of comfort with telemedicine. The patient barriers include:

- Patients lack the technology needed.
- Patients with smartphones often have limited data plans due to financial constraints.
- Patients prefer to see a doctor face to face.
- Older population's difficulties with technology.
- Some patients have vision and/or hearing impairments, impacting the benefit of telehealth.

The Network provided one-on-one technical assistance, interventions and resources to address these specific barriers. Some of the interventions and resources include:

- The Network 8 Patient Portal Telehealth page, with recent videos, flyers, and literacylevel-appropriate information regarding telehealth
- The Doctor will see you now: Telemedicine Makes It Easy
- Kidney Patient Care: Your Guide to Telemedicine
- Five Things to Know about Telehealth During the COVID-19 Pandemic video
- COVID-19: Using Telehealth to Visit Your Doctor video
- IPRO Network's Stay Healthy Stay Home Telehealth Toolkit

By providing consistent education and one-on-one training with telemedicine to each patient at the facility, staff can help patients become accustomed to using telemedicine. Dialysis patients, especially those in the older population, needed more one-on-one support and coaching on how to access the applications and device use. After this was provided, facilities found that patients had much more ease in using telemedicine as an option; however, with the end of the public health emergency in sight, many patients and providers have now resumed in-person visits.

Chart 32: Count of Rural Patients Using Telemedicine to Access a Home Modality May 2022-April 2023





ESRD Network Recommendations

Providers in the Network 8 region are monitored throughout the year for their participation in activities specified in the Network's CMS contract and performance on several quality metrics. Network 8 monitors facilities struggling to meet quality measures and develops an action plan for improvement. Facilities are provided a timeline for completing activities. Networks may recommend that sanctions or alternative sanctions be imposed on facilities that do not cooperate in meeting Network goals or ESRD Conditions for Coverage. In 2022, there were no providers who consistently failed to cooperate with Network goals.

CMS Expanded Services:

- 1. Based on feedback from patients and providers, Network 8 would recommend that CMS provide enhanced benefits for beneficiaries related to transportation services, which would decrease missed treatments and unplanned hospitalizations. Transportation services would also assist patients with access to transplant centers for assessments and follow-up appointments. Patients especially in need of this are those who are ineligible for Medicaid transportation yet cannot afford private transportation.
- 2. To increase the utilization of home dialysis, CMS may consider reimbursement for In-Home Staff Assist Dialysis, which would allow those that do not have a care partner, transportation, low health literacy, or motor functions to benefit from home dialysis.
- 3. CMS promotion of in-center Self-Care to Dialysis providers would increase patients' awareness and comfort with transitioning to home dialysis.



ESRD Network COVID-19 Emergency Preparedness Intervention

Network 8 experienced a decrease in COVID-19 variants in 2022. Dialysis cohort facilities were closed, with COVID patients being treated at their home facilities. Network 8 continued to work closely with the two QIN-QIOs that cover our three states, other state emergency management organizations, and individual state survey agencies to address COVID-19 issues. Network 8 attended state emergency management calls as well as local community coalition calls to stay apprised of any current issues to best identify and provide needed resources for dialysis providers.

Network 8 continued to distribute timely and relevant COVID-19 information to all dialysis facilities, covering topics such as locating credible sources of information, safe transportation practices, use of telemedicine, and information for screening and management of COVID-19. Network 8 also worked to optimize communication between nursing homes and dialysis units regarding COVID-19 test results and vaccinations, as well as dialysis facility policy changes enacted to ensure optimal infection prevention. Network 8 also distributed other COVID-19 professional and patient educational material through email blasts and website postings throughout the year. Resources provided were vetted by Network 8 staff and the Network's MRB based on resources available and best practices utilized by other facilities with low COVID-19 case counts.

Additionally, Network 8 submitted weekly Emergency Situational Status Reports (ESSR) to the Kidney Community Emergency Response (KCER) and CMS, reporting staff and patient COVID-19 positive and PUI cases for independent and home-only programs without NHSN accounts as needed. The Network also assisted facilities with creating NHSN accounts to allow direct entry into the system.

The Network Patient Services Department provided resources to help facilities address patients' impatience and fear, as well as address the mental health strain patients and staff faced due to the pandemic.

Dialysis and transplant facilities continued to experience staffing and supply shortages in 2022. Fourteen facilities reported facility or shift closures due to the lack of staff. Supply shortages of dialysate were addressed by facility staff by sharing supplies with sister facilities and adjusting dialysate flow rates to minimize concentrate use while providing adequate dialysis treatments.

ESRD Network Significant Emergency Preparedness Intervention

The Network 8 service area experienced various weather conditions that impacted numerous facility operational statuses in 2022. During and after each emergency disaster event, Network 8 staff provided, if applicable, the required CMS after-action reports and attended KCER hot wash meetings.

From February 3 until February 5, Winter Storm Landon impacted all three states within the Network service area. Facilities in the Network service area were proactive by treating patients early and closing on day one of the storms. Facilities implemented their emergency plans and made schedule adjustments to accommodate dialysis needs. Throughout the event, Network staff remained in contact with affected facilities. Outreach was conducted with the Alabama, Mississippi, and Tennessee Departments of Health to update them on the operational status of dialysis facilities during this event. The Texas ESRD Emergency Coalition (TEEC) hosted daily status calls with dialysis corporate leadership, KCER, ASPER, FEMA, and CMS to monitor needs and local conditions.

In the Network 8 services area, severe thunderstorms, winter weather events, flooding, tornadoes, and water crisis during March, April, August, September, November, and December were experienced. These events had a minor impact on the dialysis community.

On August 30, 2022, the water system in Jackson, Mississippi, failed due to the Pearl River flooding from severe storms. The water crisis resulted in dialysis facilities transporting water by tanker into the city to treat patients. Network 8 staff was on hand to assist with patient and facility needs.

Winter Storm Elliott impacted Mississippi on December 28, 2022, bringing bitterly cold temperatures, power outages, and dangerous driving conditions. One dialysis facility experienced bust sprinkler pipes, requiring water delivery by tanker until repairs could be completed. Several facilities in the area reported low water pressure and treated patients using water from water tankers. Throughout the event, Network staff remained in contact with affected facilities and the Mississippi Department of Health.

Additionally, Network 8 provides ongoing resources and educational outreach to dialysis facilities in preparation for events. Network capacity is enhanced through ongoing collaborations with emergency management agencies. The Network maintains an updated comprehensive emergency management plan and has a reciprocal relationship with a partner Network as well as sister Network 14 that can provide services to this region in case a catastrophic event occurs at Network 8's work site.

On February 23, 2022, the Network conducted an annual Emergency Disaster Tabletop drill with Networks 8 and 14. KCER facilitated the drill with 125 stakeholders, which included one patient. Participants included CMS representatives, LDO leadership, state agencies, Texas ESRD Emergency Coalition, and the Network staff.

Acronym List Appendix

This appendix contains an <u>acronym list</u> 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.