ESRD NETWORK 2017 ANNUAL REPORT

Description of the patient and facility population in the ESRD (End Stage Renal Disease) Network program and the outcomes of the quality improvement activities performed by this Network compared to the Network program performance



Network 4

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ESRD Demographic Data







Source of data: CROWNWeb



Source of data: CROWNWeb







Source of data: CROWNWeb



Source of data: CROWNWeb



Source of data: CROWNWeb

ESRD Network Grievance and Access to Care Data

Network 4: Grievance Data for Calendar Year 2017

Category	Cases
Grievance Cases	43
General Grievance	9
Immediate Advocacy	25
Clinical Area of Concern	9
Non-Grievance Cases	62
Facility Concern	30
Access to Care: Confirmed Involuntary Transfer/Discharge (IVT/IVD)	11
At-Risk Access to Care	21
Additional Case Information	
Averted IVT/IVD	1
Failure to Place	4
Total Cases 2017	105

Source of data: Patient Contact Utility (PCU)



Source of data: Patient Contact Utility (PCU)



Source of data: October 2017 ESRD Network Dashboard



Source of data: October 2017 ESRD Network Dashboard

Grievance Quality Improvement Activity

Goal of QIA:

Achieve a relative 20% decrease in a facility's average score from baseline (March 2017) to re-measure (September 2017) using the Centers for Medicare and Medicaid Services (CMS) defined five-point weighted scale.

Results:

The QIA grievance project achieved its goal to improve communication between the providers and patients/caregivers, while reducing the number of patient generated grievances by more than the 20% relative improvement at the end of the remeasurement period.

Interventions

A kick off webinar was provided for all participating project facilities and their patient representative(s) with training from QIRN4 staff on how to use two specific quality improvement tools: root cause analysis and PDSA cycles. We also provided the Five Diamonds Patient Safety Program, communication module, Forum grievance toolkit and a series of communication themed posters and handouts.

We provided one-on-one support via a monthly call with each facility as well as additional support to all participating project facilities through an onsite visit, emails and additional phone calls.

Facility staff focused intensely on educating themselves as well as patients in order to maximize the effectiveness of the grievance project. Patient SMEs helped in the development of interventions to help to ensure the patient perspective was included.

Identified Best Practices:

- The addition of sustainability helped to create a culture change towards a blameless grievance management environment without fear of retaliation.
- Monthly review of their grievance data helped facility staff focus on proactive interventions to address the trends as they observed them leading to a reduction in repeat grievances and increased staff confidence in their use of the PDSA cycle.
- Facility staff and patients worked to develop a culture change toward a grievance process free from blame and fear of retaliation.

Identified Barriers:

Facility staff members communicating effectively at every encounter with patient(s) so that they reduce any chance of misunderstanding that can result in patient dissatisfaction with the grievance process.

ESRD Network Quality Improvement Activities



Source of data: October 2017 ESRD Network Dashboard.

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

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

Goal of QIA: Assist 22 identified facilities (representing 5% of the Network 4 patient population) to achieve at least a 5% improvement in the systematic inclusion of patient-driven Specific, Measureable, Achievable, Realistic and Timely (SMART) goals when developing patients' plans of care. Ensure at least 5% of the patients who identified a SMART goal achieved it by the end of September 2017. This project had the ultimate goal of improving the facilities' In Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) survey scores.

Results

Cumulatively, 25.9% of patients in the selected facilities set and achieved a goal at the conclusion of this project. All but two facilities achieved at least a 5% improvement; one facility achieved a 4.0% improvement and one experienced severe staffing issues achieving only a 2.4% improvement

Interventions

We created and conducted kick off webinars for each of the selected facilities that explained the use of SMART goals and the intent of the project. Each facility received a project specific "toolkit" that contained improvement concepts from the Institute for Healthcare Improvement (IHI) model for improvement along with a balance of quality improvement tools such as Plan-Do-Study-Act cycles, root cause analysis and systems process mapping to assist in meeting project goals. Throughout the project, we provided feedback, coaching as well as individual facility visits to provide support, education and guidance.

Each facility employed the use of targeted education about SMART goals and motivational interviewing methods to their staff which enabled them to skillfully communicate with patients and elicit patient-driven SMART goals.

Identified Best Practices

- Process mapping of the care planning process and identification of patient-driven SMART goals
- Use of a "team" approach; Including all staff and the use of team huddles to discuss each patient's goal and resolve any patient-identified barriers

- Patients needed additional encouragement to identify and work on a patientdriven SMART goal.
- Lack of staff knowledge regarding motivational interviewing techniques and patient-driven SMART goals
- Lack of real time ICH-CAHPS data to confirm improvement and sustainability of project interventions



Source of data: CROWNWeb

Long Term Catheter Quality Improvement Activity

Goal of QIA: Assist facilities with long-term catheter (LTC) rates greater than 10% at baseline (15.89%) to reduce long-term catheter usage by at least 2 percentage points (13.89%) by September 30, 2017.

Results: At the conclusion of the project, the LTC rate was 14.4%. Network 4 was 0.01 from achieving the goal in June, but the rate increased 0.50 points from June to July. Network 4 did not succeed in decreasing the required 2 percentage point by the July measurement date. Analysis of the data suggested a data "fix" by one of the large dialysis organization may have contributed to an increase in the number of catheters that were reported.

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 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. We further implemented a multi-pronged approach to improvement which included comparative feedback reports, encouragement of process changes at the dialysis unit and development/dissemination of educational materials. In addition to the general interventions, we provided additional mediations for a smaller subset of focus facilities (69) which at baseline presented with the highest long-term catheter rates and/or facilities which have been identified by the provider's leadership to participate in the focus group. Resources used as part of our interventions included the Catheter Reduction Toolkit developed by the Forum of ESRD Networks' Medical Advisory Council (MAC) and Fistula First Catheter Last resources from the National Coordinating Center.

Identified Best Practices

- While educating patients about AVF/AVG, include other patients willing to show their access and share their experience
- Use a flow sheet (whiteboard) to visualize where patients are in the catheter removal process
- Conduct quarterly meetings with vascular surgeons to ensure patient movement through catheter removal process
- Prior to first treatment, set up patient for vein mapping and surgical evaluation appointment

- Access to vascular surgeons and long wait time for appointments
- Multiple fistula revisions
- Patient refusals related to age
- New admissions with catheters
- Slow maturation of arterial fistula



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

Blood-Stream Infection Quality Improvement Activity

Goal of QIA: Achieve at least a 5% or greater relative reduction in the aggregated BSI rate from the baseline period (first and second quarter of 2016) by the end of June 2017.

Results: At the conclusion of this project, the aggregated BSI rate at the remeasurement period exceeded the goal by demonstrating a 35.1% relative reduction

Interventions

CDC BSI Prevention protocols and audits for hand hygiene (HH), catheter connection/disconnection and Scrub the Hub, root cause analysis (RCA) and CDC patient education were the tools used in conjunction with the IHI PDSA cycle. Requiring 3 consecutive months of compliance was one strategy used to support sustainability of CDC evidence-based practices. This strategy proved to be a high bar with only 6 facilities achieving this goal for the hand hygiene protocol and 13 for the catheter connection/disconnection protocol which includes Scrub the Hub.

Identified Best Practices

- Select only one hand hygiene opportunity per month, based on an initial audit to identify the most frequently missed opportunity to focus on and require at least 3 consecutive months of 100% compliance before selecting a new opportunity of focus
- Select only two missed catheter connect/disconnect protocol steps to focus on each month and require 100% compliance with all protocol steps for at least 3 consecutive months
- Provide feedback and coaching to individual facilities struggling with consistently achieving 100% compliance on CDC BSI Prevention audits
- Hand Hygiene Patient engagement increased awareness and knowledge of patient involvement, use of an audible code word or bell to alert all staff to a "near miss" or breach in the protocol, visual reminders in bathrooms, use of Glo-Test gel
- Catheter Connection/Disconnection: Use peer-to-peer accountability, staff demonstration of catheter/skills rather than just verbal education, continuous verbal reminders, monthly sharing of data with staff and emphasizing prevention of infection and death.

- Most common barrier to patient engagement was the discomfort of the facility staff to ask a non-healthcare worker to perform CDC audits
- Lack of delegation to staff or patient/family to assist with CDC audits. This
 places an additional workload strain and, at times, duplicative work on the
 facility managers
- Facility leadership's lack of understanding and experience using the IHI PDSA quality improvement cycle and tools.



Source of data: CROWNWeb



Source of data: CROWNWeb

Hepatitis B and Pneumococcal Pneumonia Vaccination Quality Improvement Activity

Goal of QIA: Increase hepatitis B virus (HBV) and pneumococcal pneumonia vaccination rates in 25 outpatient dialysis facilities by at least 3 percentage points above the 2016 aggregated baseline rate by the end of September 2017

Results: At the conclusion of this project, the aggregated rates for both vaccinations exceeded the goals

Interventions

CDC Standards for Adult Immunization Practices was the recommended evidencebased source for use with the IHI PDSA cycle to improve vaccination rates. We developed vaccine-specific monthly tracking tools which incorporated the IHI PDSA cycle in order to maximize the efficiency of associating reporting results with specific interventions on a single electronic document. This document was shared with us for review and feedback. In addition, we developed and distributed two reports to all focus facilities: a facility level rate report for each vaccine that reflected the most current data and a patient-level report that allowed for drilling down on specific patient barriers and developing interventions as appropriate.

Identified Best Practices

- Pneumococcal pneumonia vaccine The most frequent practices to improve this rate were patient education, education of staff on correct documentation in the facility's electronic medical record (EMR) and the need for assessment and scheduled reassessments of the patient's immunization status.
- HBV vaccine The most frequent practices to improve this rate were patient education and the recommendation to be vaccinated by a primary care provider. The identification of the health-care provider's recommendation as a best practice in this QIA is consistent with the National Vaccination Advisory Council's 2014 report that this strategy is one of the most important predictors of vaccination receipt.
- Individual facility best practices included: scheduling vaccinations, initiating a new process to obtain consent for vaccinations and dedicating a staff member to the tracking process.

- The RCA revealed the main barrier to high vaccination rates was related to the reporting of existing data to either CROWNWeb or the facility EMR. Data had not reported to CROWNWeb or correctly reported in the facility EMR.
- Less common barriers to HBV vaccination reporting were patient refusals or no dedicated staff member tracking the process. For pneumococcal pneumonia vaccination, the barriers included obtaining vaccination data located in records outside of the dialysis clinic and not having a dedicated staff member tracking the process.



Source of data: October 2017 ESRD Network Dashboard



Source of data: October 2017 ESRD Network Dashboard

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

Population Health Focused Pilot Projects Quality Improvement Activity

Goal of QIA: Assist 5% (1,066 patients) of the ESRD patient population in the Network 4 service area, regardless of modality, to demonstrate at least a 5-percentage point increase in the rate of transplant referrals. At the same time, decrease the identified female gender disparity by at least 1 percentage point by the end of third quarter of 2017.

Results: At the conclusion of the project, the overall kidney transplant referral rate for the participating facilities improved from a baseline of 23.9% to 41.8%; the female disparity baseline of 7.2% decreased to 2.6%; which is a 4.6 percentage point reduction; exceeding the 1 percentage point CMS goal.

Interventions:

We used a multi-pronged approach which included comparative feedback reports, encouragement of process changes at the dialysis unit and development of transplantation educational materials geared toward the female dialysis patients. Furthermore, interventions implemented are grounded in the foundation of the CMS' project attributes:

Rapid Cycle Improvement Attribute in Action: Providers completed root cause analysis (RCA) and identified barrier(s) for referring patients for transplant. Providers were expected to carry out interventions targeting the barriers. We developed and disseminated a template for providers to document the PDSA cycles to test the effectiveness of their interventions.

Customer Focus and Value to Beneficiaries, Providers and CMS: We convened a workgroup to assist in the development, implementation, and evaluation of the project. The workgroup included patients to provide the patient's voice. The group developed an educational flyers addressing general transplant education for providers and a communication tool to bridge the communication gap between dialysis providers and transplant centers.

Sustainability: Networks 4 and 2 co-led a collaboration project with Networks 1, 3, 6, 9, and 10 to develop a Transplant Referral Sustainability Guide.

Innovation: We convened a Network 4 Transplant Mentor Support Group to be available for patient-to-patient sharing of experiences with the goal of encouraging other patients to explore transplant as an option.

Boundarilessness and Unconditional Teamwork: We committed to engaging multiple entities, Networks and stakeholders to spread and share improvement activities

Identified Best Practices

- In order to not miss opportunity to reassess transplant information with patients, one of the providers in Network 4 "hardwired" a process change in which the facility included discussing transplant information during every patient medication review time
- Use patient story as education resources

Identified Barriers

Medical contraindications, patient refusals/not interested, patient age



Source of data: October 2017 ESRD Network Dashboard

Quality Incentive Program Quality Improvement Activity

Goal of QIA: Assist ten of the poorest Kt/V adequacy performing facilities from Network 4 in completing at least one full PDSA cycle <u>and</u> work to achieve at least a 25% relative improvement (RI) in the facilities' overall Kt/V adequacy performance rate <u>or</u> to exceed the ESRD QIP penalty threshold for three consecutive months by the end of third quarter of 2017.

Results: At the conclusion of this project, all facilities but one were improving and trending towards meeting their improvement goal.

- 1) Six facilities maintained three consecutive months of meeting the 25% RI Goal
- 2) One facility maintained two consecutive months of meeting the 25% RI Goal
- 3) Two facilities met first monthly 25% RI Goal at the conclusion of this project
- 4) One facility did not meet the 25% RI Goal for any month

Interventions

We created and conducted a kickoff webinar for each project facility. After the webinar, we provided a toolkit containing clinical resources about Kt/V adequacy as well as guidance on improvement concepts from the Institute for Healthcare Improvement (IHI) model for improvement along with a balance of quality improvement tools such as Plan-Do-Study-Act cycles, root cause analysis and systems process mapping that were used by all participating facilities to assist in meeting project improvement goals goals.

Each of the project facilities conducted staff education on Kt/V adequacy. Then as a team, they reviewed and developed standardized processes for reviewing and addressing patient Kt/V results. Facilities hardwired these processed into their daily activities to ensure sustainability.

Identified Best Practices

- Process mapping of Kt/V monitoring to identify areas for improvement
- Utilization of weekly patient specific lab reports (Kt/V)
- Monthly team review of patient specific needs to improve Kt/V (Frequency and Duration of Treatments, size of dialyzer)
- Use of Kt/V algorithms and decision tress for addressing sub-optimal Kt/V results
- Education of all clinical staff on how to achieve most optimal blood flow for all patients

- Smaller facilities can miss the improvement goal if just one patient does not meet their Kt/V adequacy.
- Patients, who despite all efforts are unable to attend dialysis at the optimal frequency to achieve an adequate Kt/V



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

National Healthcare Safety Network Data Quality Improvement Activity

Goals of QIA: Increase the percentage of positive blood cultures (PBCs) collected from the hospital within one calendar day of a patient's admission between the baseline period (January through June 2016) and the re-measurement period (January through June 2017) using the National Healthcare Safety Network (NHSN) as the data source. Establish an effective communication process with a target hospital to improve the reporting of PBCs identified in hospitals to the dialysis clinic by June 30, 2017.

Results: The NHSN reporting rate of PBCs increased by 3.38 percentage points at the re-measurement period. All focus facilities improved an existing process of communication or initiated a new process of communication with at least one target hospital by June 30th. New and improved processes of communication varied and included gaining access to hospital electronic medical records, improving the communication process with the medical records department and communicating directly with the hospital microbiology lab, hospital infection preventionist, acute dialysis staff, nurse practitioner or ESRD Seamless Care Organization (ESCO) staff.

Interventions

Prior to the start of the project, a baseline survey was conducted to identify current processes, barriers and hospitals most frequently used to admit patients. We developed a data collection tool which served as a hospital blood culture tracking tool, the foundation for the PDSA cycle and as a communication tool with QIRN4. Multiple teleconferences were held with a core group of clinic leaders to develop a process of communication with hospital infection preventionists; this process was shared with all focus facilities. Once a hospital gave access to their EMR to a focus facility, QIRN4 promoted spread of dialysis facility connectivity to an EMR by providing hospital contact information to other facilities who also admitted patients to this hospital.

Identified Best Practices

• The best practice to facilitate clinics obtaining access to a hospital EMR was the spread of the appropriate contact person at the hospital to start this process to other clinics in the area which also admit their patients to the same hospital.

- The two main facility barriers identified were the slow process of hospital medical records departments and the lack of access to a hospital EMR.
- Less common barriers included the inability to customize the lab report from an EMR, inability to engage the Infection Preventionist, no consistent reliable process, obtaining consent to release medical records for each admission is an extra step, clinic is not aware that blood cultures were drawn at the hospital, inconsistent response from Case Management department. Some hospitals incorrectly believe this communication is a HIPAA violation.

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 required.

Recommendations for Sanctions

Quality Insights Renal Network 4 did not recommend sanctions for any facilities in 2017.

Recommendations to CMS for Additional Services or Facilities

Quality Insights Renal Network 4 did not recommend any additional services or facilities in 2017. The facilities and services available to patients in the Network 4 geographic area are well distributed and are readily accessible to patients in need.