Welcome to the IPRO ESRD Network Program
Vascular Access Educational Webinar

The webinar will begin momentarily!
Vascular Access Planning Strategies to Reduce LTC Rates

May 3, 2018
Welcome/Opening Remarks

Jeanine Pilgrim, Quality Improvement Director
IPRO ESRD Network Program
Housekeeping Reminders

• All phone lines muted upon entry to eliminate background noise/distractions

• Be mindful of muting your phone when not speaking

• Please don’t place the call on hold, instead disconnect your line and rejoin the call when able

• We’ll be monitoring our WebEx chat board throughout the webinar for questions or comments

• Be present and engaged in our topic presentations

• Please be prepared for sharing and actively participating in the open discussion
Agenda

• Project Overview and Goal
• ERSD QIP
• Quality Improvement Basics
• Quality Improvement Toolkit
• Cather Reduction Toolkit
• Steps to Sustain Improvement
• Health Information Exchange
Quality Improvement Activity Overview

Nike Akinjero, Quality Improvement Coordinator
Project Overview

Inclusion Criteria:

• Network facilities with a long-term catheter (LTC) (catheter in use > 90 days) in use rate above 15%.

Goal:

• Reduce LTC rates by at least 2 percentage points at re-measurement in selected facilities.

Secondary Goal:

• Promote the implementation of CDC recommended audit tools.

• Assist at least 20% of selected facilities to join a Health Information Exchange (HIE) to receive information relevant to positive blood cultures during transition of care.
Root Cause Analysis Findings

- RCA Data indicate challenges include:
- Patient Staff Education
- New Admissions with Catheters
- Lack of early referrals
- Emergency dialysis starts
Why is this Important?
Quality Incentive Program

Loretta Ezell, Quality Improvement Director
ESRD Network of the South Atlantic
ESRD Quality Incentive Program (QIP)

• The Centers for Medicare & Medicaid Services (CMS) administers the End-Stage Renal Disease (ESRD) Quality Incentive Program (QIP) to promote high-quality services in outpatient dialysis facilities treating patients with ESRD.

• The first of its kind in Medicare, this program changes the way CMS pays for the treatment of patients with ESRD by linking a portion of payment directly to facilities’ performance on quality of care measures.

• These types of programs are known as “pay-for-performance” or “value-based purchasing” (VBP) programs.
ESRD Quality Incentive Program (QIP)

• The ESRD QIP will reduce payments to ESRD facilities that do not meet or exceed certain performance standards.

• This reduction will apply to all payments for services performed by the facility receiving the reduction during the applicable payment year (PY).

• Payment reductions result when a facility’s overall score on applicable measures does not meet established standards.

ESRD Quality Incentive Program (QIP)

CMS publicly reports facility ESRD QIP scores; on the Dialysis Facility Compare website.

Each facility is required to display a Performance Score Certificate that lists its Total Performance Score, as well as its performance on each of the quality measures identified for that year.
Total Performance Score

CLINICAL
- Measure Topic?
  - Vascular Access Type
    - Access via AVF
    - Access via catheter
  - Kt/V Dialysis Adequacy
    - Hemodialysis
    - Peritoneal Dialysis
    - Pediatric Dialysis
    - Hypercalcemia
    - NHSN Bloodstream Infection
    - SRR
- Individual Measure Scores
- Measure Calculations
  - Generally, each clinical measure scored by either achievement or improvement (whichever results in the higher score for facility); see two exceptions
- Total Category Weight
- Payment Reduction Percentage
  - 100 pts.
  - 60 pts. (min. TPS)
  - 75% =
  - 25% =

REPORTING
- Individual Measure Scores
  - ICH CAHPS Survey
  - Mineral Metabolism
  - Anemia Management
- Measure Calculations
  - Each reporting measure scored by satisfying requirements according to points system
- Total Performance Score (TPS) is the sum of the weighted totals from both measure categories
## Total Performance Score

<table>
<thead>
<tr>
<th>Total Performance Score</th>
<th>Payment Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 to 100</td>
<td>No reduction</td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.5%</td>
</tr>
<tr>
<td>40 to 49</td>
<td>1.0%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>1.5%</td>
</tr>
<tr>
<td>0 to 29</td>
<td>2.0%</td>
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</table>
Vascular Access Type: AVF

**Numerator:** % of patient-months on hemodialysis during the last hemodialysis treatment of the month using an autogenous AV fistula with two needles.

**Denominator:** # Medicare patient-months at facility during the measurement period.

**Denominator Exclusions:**
1. < 18 years old
2. Not on hemodialysis
3. both a fistula and graft reported
4. fistula, graft, and catheter reported
5. missing access type
6. Not on ESRD treatment as defined by a completed 2728 form, a REMIS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Vascular Access Type: CVC

**Numerator:** # Patient-months in the denominator for patients continuously using a catheter ≥ 90 days prior to the last treatment during the month.

**Denominator:** # Medicare patient-months at facility during the measurement period.

**Denominator Exclusions:**
1. Patients younger than 18 years and 90 days
2. Not on hemodialysis
3. Both a fistula and graft reported
4. Fistula, graft, and catheter reported
5. Missing access type
6. Not on ESRD treatment as defined by a completed 2728 form, a REMIS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Questions or Comments?
How do I get started?
Quality Improvement Strategies

Loretta Ezell, Quality Improvement Director
ESRD Network of the South Atlantic
The National Forum of ESRD Networks Toolkits

2010

Quality Assessment and Performance Improvement (QAPI)
Developed by the Forum of ESRD Networks’ Medical Advisory Council (MAC)

The Forum MAC has developed a series of QAPI toolkits to assist dialysis facilities in meeting the requirements of the Conditions for Coverage.

2011

Catheter Reduction Toolkit
Developed by the Forum of ESRD Networks’ Medical Advisory Council (MAC)

The Forum MAC has developed a series of QAPI toolkits to assist dialysis facilities in meeting the requirements of the Conditions for Coverage.
Quality Assessment and Performance Improvement

- Evaluate processes
- Determine the barriers to change
- Identify ways to overcome barriers
- Seek out best practices
- Create an environment of collaboration
Plan, Do, Study, Act

<table>
<thead>
<tr>
<th>QI PROJECT PHASES</th>
<th>ACTIVITIES</th>
<th>KEEP IN MIND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plan</strong></td>
<td>Make a plan for the change, collect baseline data, plan to carry out the cycle (who, what, where, when)</td>
<td>Brainstorming, motivating</td>
</tr>
<tr>
<td><strong>Do</strong></td>
<td>Carry out the plan, document problems and unexpected observations, continue to monitor data</td>
<td>Flowchart, run chart</td>
</tr>
<tr>
<td><strong>Study</strong></td>
<td>Complete the analysis of the data, compare data to predictions, summarize what was learned</td>
<td>Fishbone diagram, Pareto chart, control chart, histogram</td>
</tr>
<tr>
<td><strong>Act</strong></td>
<td>What changes are to be made? Develop ongoing evaluation/monitoring, next cycle?</td>
<td>Flowchart, brainstorming</td>
</tr>
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Step 1 – Planning with Root Cause Analysis

- The 5 Whys – Discovering the Root Cause

- The key to solving a problem is to first truly understand it.

- One way to identify the root cause of a problem is to ask “Why” 5 times.

Why did this happen? Again and again until you reach the root cause.
Step 2 - Do

Access Plan

- Yes
  - Contact physician for plan and vein mapping
  - Schedule Vein Mapping
  - F/U weekly until access is in place

- No
  - Assess access
    - Patient Refuses
      - Utilize protocol for new access
      - 6 successful cannulations with 2 needles
      - CVC removed
  - Patient presents with CVC
    - F/U with Physician and patient education
Step 3 – Study with Fishbone or Cause-Effect Diagrams

Allows teams to organize and sort their ideas about problems. Cause-effect diagrams show how different factors can lead to the outcome, or problem, that led to the root cause analysis. Using these diagrams increases communication and teamwork in the RCA team.

[Diagram showing a Fishbone diagram with categories for Surgeon Barriers, Patient Barriers, Facility Barriers, and Nephrologist Barriers, leading to an AVF Goal Not Met at the root.]

- Surgeon Barriers: AVF not primary access choice for surgeons
- Patient Barriers: AVF placed but patient refuses to use, Patient refusal to have AVF placed
- Facility Barriers: High initial fistula failure rate
- Nephrologist Barriers: Late referral to surgeon

AVF Goal Not Met
## Sample Barriers and Interventions Chart

<table>
<thead>
<tr>
<th>Patient Barriers</th>
<th>Interventions</th>
<th>Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient barriers</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Patient does not want alternative access | Identify and address reason  
  - Fear of needles  
  - Financial constraints  
  - Cosmetic  
  - Waiting for transplant  
  - Fear of surgery  
  Educate patient and family  
  Discuss potential risks of catheters | Nephrologist, RN, Dialysis tech |
| **Nephrologist Barriers** | | |
| Nephrologist not evaluating and/or referring patient | Discuss patient at care management meeting  
  Adopt catheter reduction program with entire medical department  
  Review patient individually with nephrologist | Care team, RN, Dialysis tech  
  Medical director, administrator  
  Medical director |
| Nephrologist not taking responsibility for patients access management | Discuss patient at care management meeting  
  Review patient individually with nephrologist | Care team, RN, Dialysis tech  
  Medical director, administrator |
| **Facility Barriers** | | |
| Lack of systematic catheter reduction program | Develop and institute CQI program | Medical director, CQI team |
| Lack of standard processes and forms | Develop and institute CQI program | Medical director, CQI team |
| **External Barriers** | | |
| Hospital discharging patients with catheters and no access plan | Work with hospital to include them in the VA CQI program | Medical director |
| Non-cooperative surgeons | Include surgeons in CQI process  
  Consider referral to regional center | Medical director, nephrologist  
  Nephrologist |
Step 4 - Act
Quality Assessment and Performance Improvement Team

• Evaluate processes
  • What changes were needed
  • Type of ongoing Evaluation
• Determine the barriers to change
• Identify ways to overcome barriers
• Seek out best practices
• Create an environment of collaboration
Questions or Comments?
Tools and Resources

Nike Akinjero, Quality Improvement Coordinator

ESRD Network of New York
Vascular Access Monitoring Resources

PROFESSIONALS

Vascular Access Planning Guide for Professionals

PATIENTS

Questions or Concerns about a Permanent Access?
Let’s Talk!

Lifeline for a Lifetime:
Planning for Your Vascular Access

esrd.iipro.org
Vascular Access Planning Guide for Professionals
Eight steps in creating an access plan

- Develop an individualized access plan for each patient
- Refer the patient for vessel mapping
- Coordinate an appointment with a surgeon
- Coordinate access surgery and follow up
- Access AVF maturation / AVG readiness
- Apply cannulation protocol
- Arrange for catheter removal
- Monitor the access
Vascular Access Monitoring Resources

It only takes a minute to save your patient’s life line.

**GO**
The skin over the access is all one color and looks like the skin around it.

**STOP**
The skin over the access is all one color and looks like the skin around it.

Look:
- There is redness, swelling, or drainage.
- There are skin bulges with shiny, bleeding, or pooling skin.

Listen:
- There is no sound, decreased sound, or a change in sound.
- Sound is different from what a normal Bruit should sound like.

Feel:
- Pulsatile: The beat is stronger than a normal pulse. Fingers placed lightly on the access will rise and fall with each beat.
- Thrill: A vibration or buzz in the full length of the access.
- Pulse: Slight beating like a heartbeat. Fingers placed lightly on the access should move slightly.

Arm Elevation:
- Upper Arm AVF: The AVF outflow vein partially collapses when the arm is raised above the level of the heart. It may feel “flabby” when palpated.
- Lower Arm AVF: The AVF outflow vein collapses when arm is raised above the level of the heart.

It only takes a minute to save your patient’s line.

Dialysis Care Team:
- Perform an access check at each treatment or when patient reports a change.
- Reinforce importance of daily access checks to patient.
- Listen to the patient.

Look:
- Arm Elevation Test (AVF Only):
  - Was there any abnormal findings during the access check?
    - No
      - Document that there were no abnormal findings.
    - Yes
      - Document findings and refer to expert clinician.

Augmentation Test (Optional):
- Expert Clinicians:
  - Access each access monthly or more often if problems are reported.

Visit www.oardncc.org for more information.
Vascular Access Patient Resource Toolkit

Questions or Concerns about a Permanent Access?

Let’s Talk!

Hemodialysis Vascular Access

Hemodialysis cleans your blood through a fistula, graft, or catheter. If you have kidney failure, one of these will be your LIFELINE!

Talk with your doctor to decide which type of vascular access is best for you.

Fistula

A fistula forms a direct connection between an artery and vein. The vein stretches over time, allowing needles to be used.

Advantages

- Affordable
- Improved blood flow
- Lasts longer, up to 20 years

Disadvantages

- Requires lifelong care
- Possible need for subsequent intervention

Catheter

A catheter is a tube inserted into a vein in the neck or arm to provide vascular access for hemodialysis. The tip rests in your heart, it is usually a temporary access, is the third choice for getting access to the bloodstream for hemodialysis, for some patients it is the only choice and will need to be used as a permanent access.

Advantages

- Can be used immediately after placement

Disadvantages

- Higher infection risk, which can be very serious or fatal
- Increased hospitalizations
- Does not last long, usually lasts one year
- May require longer treatment times
- Requires access to moderate to high doses
- Cannot shower without special apparatus
- High risk of needing frequent procedures
- Risk of developing infection

Graft

A graft is a tube, usually made of plastic, that connects an artery to a vein. Arterial needles are used to puncture the graft and are the second best way to get access to the bloodstream for hemodialysis.

Advantages

- Permanent
- Beneath the skin
- May be used after 2 weeks, in some cases

Disadvantages

- Increased hospitalizations
- Increased risk of infection
- Increased risk of other complications and repeat procedures
- Does not last as long as a fistula

Fistula or Catheter: The Patient’s Perspective

esrd.ipro.org

Lifeline for a Lifetime:
Planning for Your Vascular Access

esrd.ipro.org

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Patient Peer Mentorship Training Program

Patients Helping Patients Learn About Kidney Care Choices

What will be covered in this Module?

- Part 1: The Basics of Vascular Access
- Part 2: Introduction to the Vascular Access Resource Toolkit
- Part 3: Using the Toolkit
- Part 4: Tips to Remember
Patient Peer Mentorship Training Program

Module #1: Talking Effectively With Another Patient

Module #2: Mentoring to Support Choices

Module #3: Helping Peers Plan for a Vascular Access
Vascular Access Monitoring Resources

- ESRD National Coordinating Center (NCC) Vascular Access Toolkit
- Professional Vascular Access Management
- Access Monitoring
- Catheter Checks
- Ready, Set, Go: New Fistula or Graft Daily Check


- Lifeline for a Lifetime Patient and Provider Resources

Questions or Comments?
Data Collection and Monthly Reporting

Internal and External Reporting

Loretta Ezell, Quality Improvement Director

ESRD Network of the South Atlantic
# Monthly Catheter Tracking Tool

<table>
<thead>
<tr>
<th>Facility:</th>
<th>Data should reflect the facility's ending census on the last day of the month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
</tr>
<tr>
<td>1 How many chronic non-transient in-center hemodialysis patients did you have on the last day of the month?</td>
<td>100</td>
</tr>
<tr>
<td>2 Of the patients in question #1 above, how many were using a catheter only for vascular access?</td>
<td>35</td>
</tr>
<tr>
<td>3 Of the patients in question #2 above, how many have been using a catheter for 90 or more days?</td>
<td>25</td>
</tr>
<tr>
<td>4 Of the patients in question #2 above, how many have been referred for mapping and permanent access?</td>
<td>10</td>
</tr>
<tr>
<td>5 Of the patients in question #4 above, how many have been scheduled for AVF / AVG placement?</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>35.0%</td>
</tr>
<tr>
<td>25.0%</td>
</tr>
</tbody>
</table>
Things to Consider

• The Patient is the owner of the access

• Listen to the patients concerns

• Partner patient with a Peer Mentor

• Address concerns of Needle Fear

• Access events provide an opportunity to explore other modalities i.e. PD

• A problem AVG/AVF is a catheter waiting to happen