Vascular Access
Best Practices Webinar
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Quality Improvement Director
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Agenda
Topics

• Know Your Network
• LTC Reduction Quality Improvement Activity (QIA) Expectations
• Network 1 Comparative Data
• Best Practices
• Data Reporting
• Next Steps
• Resources
• Open Discussion
• WebEx Survey
Know Your Network

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LTC Reduction QIA Expectations

September 2016 – August 2017
Long-Term Catheter Reduction QIA  
September 2016 – August 2017

> 10%, > 90 Days

- **Criteria**
  - Targeted facilities determined by those >10% LTC rates

- **Selection Requirements**
  - September 2016 data to determine targeted facilities
  - Facilities with catheter in use >90 days (LTC), >10%
  - Patient Subject Matter (SME) participation

- **Facility Goal**
  - Set by Network using quality deficit formula
  - Decrease LTC rate by 2%-8% in targeted facilities
Network 1
Comparative Data

CVC Data September 2016 to Present
# Long Term Catheter Rate Reduction QIA Network 1 Facilities by Affiliation

**182 Eligible Facilities in Network**

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Facilities in Network</th>
<th>Target Facilities by Affiliation</th>
<th>% of Facilities by Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DaVita</td>
<td>45</td>
<td>13</td>
<td>29%</td>
</tr>
<tr>
<td>DCI</td>
<td>9</td>
<td>4</td>
<td>44%</td>
</tr>
<tr>
<td>FKC</td>
<td>76</td>
<td>46</td>
<td>61%</td>
</tr>
<tr>
<td>Independent</td>
<td>35</td>
<td>14</td>
<td>40%</td>
</tr>
<tr>
<td>NRAA</td>
<td>17</td>
<td>9</td>
<td>53%</td>
</tr>
<tr>
<td>Totals</td>
<td>182</td>
<td>86</td>
<td>47%</td>
</tr>
</tbody>
</table>
Long Term Catheter Rate Reduction QIA
Target Facilities by Affiliation

Currently the Network is working with 86 Target Facilities that have LTC rates greater than 10%.

<table>
<thead>
<tr>
<th>Affiliation</th>
<th># of Target Facilities</th>
<th>% of Total Target Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DaVita</td>
<td>13</td>
<td>15%</td>
</tr>
<tr>
<td>DCI</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>FKC</td>
<td>46</td>
<td>53%</td>
</tr>
<tr>
<td>Independent</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>NRAA</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>Totals</td>
<td>86</td>
<td>100%</td>
</tr>
</tbody>
</table>
Vascular Access Trending
Target Facilities

Goal: 2.0% Reduction (13.02%)
### Long Term Catheter Rate Reduction QIA

#### Rate of Improvement by Affiliation

Many facilities not meeting incremental goals set by the Network

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Target Facilities by Affiliation</th>
<th>Target Facilities Meeting Goals</th>
<th>Target Facilities Not Meeting Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>DaVita</td>
<td>13</td>
<td>6 (46%)</td>
<td>7 (54%)</td>
</tr>
<tr>
<td>DCI</td>
<td>4</td>
<td>1 (25%)</td>
<td>3 (75%)</td>
</tr>
<tr>
<td>FKC</td>
<td>46</td>
<td>14 (30%)</td>
<td>32 (70%)</td>
</tr>
<tr>
<td>Independent</td>
<td>14</td>
<td>5 (36%)</td>
<td>9 (64%)</td>
</tr>
<tr>
<td>NRAA</td>
<td>9</td>
<td>4 (44%)</td>
<td>5 (56%)</td>
</tr>
<tr>
<td>Totals</td>
<td>86</td>
<td>31 (36%)</td>
<td>56 (64%)</td>
</tr>
</tbody>
</table>
Best Practices

What Has Worked in the Field?
Best Practices
Prior to Patient Admission to the Facility

• Active participation by nephrologist at the facility and in the hospital
• Facilities can have access education for pre-ESRD patients
• Nephrologist to contact surgeon directly prior to patient discharge
  - Vein mapping
  - Surgeon appointment scheduled prior to discharge
  - Information on discharge planner to facility staff for further questions and future communication
• Patient education for permanent access starts before discharge
  - Home therapy education
  - Transplant waiting list
  - Central venous line is for emergency dialysis and may not be patient's permeant access
Best Practices
On Admission to the Facility

- Discuss access placement with patient on first day of admission
  - Patient hospital preference
  - Is transportation needed for patient
  - What time of day is best for patient appointments
- Nephrologist to discuss access planning with patient
- Nephrologist to contact surgeon directly
  - Long wait times for:
    - Consultation
    - Surgery date
    - Follow to cannulate
    - Access Intervention
Best Practices: Vascular Access Coordinator

- Have one or two individuals designated to manage vascular access needs
  - Track patient progress thought process
    - Stay organized
    - Use a patient level tracking tool
  - Set up appointment for patient
    - Does patient need vein mapping prior to surgery consult
  - Communicate with Social work if transportation arrangements are needed
  - Follow up with patient
    - Did they go to their appointment
    - Was a surgery date scheduled
    - Do the patient need a PCP appointment, EKG, labs, etc., prior to surgery
Best Practices
Vascular Access Coordinator

- Build a good rapport with the vascular surgeons office
  - Scheduling Department
- Get to know your surgeons
  - Schedule face to face meeting with the surgeons and nephrologist for open discussion of:
    - multiple failed access attempts
    - Options for patient that have poor vasculature
      - Possible PD catheter
    - Non maturing access
    - Possible revision
Best Practices
Maintaining Current Access

• Through assessment of access prior to cannulation
  – Look
  – Listen
  – Feel
• Develop a cannulation team to assess and cannulate new fistulas
• Infection Prevention
  – Maintain aseptic technique during cannulation
    • Chlorohexidine recommended over alcohol and betadine
  – Practice good hand hygiene
  – Clean hands prior to gathering clean supplies for “take off”
    • Sterile band aids to cover exit site
Best Practices
Maintaining Current Access

• Keep access visible at all times during treatment
• Anticipate problems with access
  – Regularly performing access flow testing
  – Monitoring venous pressures
  – Extended bleeding post treatment
  – High pitch bruit on auscultation
• Know the options
  – Interventional radiology (IR)
  – Access center
  – Advocate for patient if necessary to avoid CVC placement
Best Practices
Maintaining Current Access: Staff Education

- Staff Education
  - Monitor staff using audit tools
    - CDC infection prevention audits
    - Facility level patient schedule audits
  - Regular staff in-services for access education and infection prevention
    - Cannulation Camps for all floor staff
  - Yearly skills evaluation
Best Practices
Maintaining Current Access: Patient Education

• Patient Education
  – Keep fistula or graft clean
    • Do not leave dressing on exit site for extended period of time
  – Monitor access at home
    • Look for any redness, swelling, or drainage at home
    • Feel for a “pulse”
  – Allowing for proper blood flow through the access
    • Do not take blood pressure or start IV on arm with access
    • Do not sleep on the arm with access
    • Do not wear restrictive clothing
    • Do not carry more than 10 lbs. with access arm
Best Practices
Current and Accurate Reporting

• Updating Electronic Medical Records
  – All patient appointments are in chart
  – All referrals for appointments are document and signed by nephrologist
    • All signed referrals have been faxed to surgeons office
  – Once access has been cannulated successfully with one needle, patient “current access type” should be updated in CROWNWeb
    • Updated monthly
Data Reporting

Updates and Changes
• Are Acute patients included?
• “Date Access Type Changed” is important
  – Cannot be before “Date Regular Dialysis Began” (field 24 on 2728 form)
  – If catheter is replaced, date does not change
• If access is used with one needle in catheter and one needle in fistula, it will not be counted under catheters
• Pay attention to Vascular Access Types
  – AVF 2 needles
  – AVG 2 needles
  – AV Fistula Single Needle Device
  – AV Graft Single Needle Device
  – Catheter
  – AV Fistula combined with AV Graft
  – AV Fistula Combined with Catheter
  – AV Graft Combined with Catheter
  – Port access
  – Other / Unknown
Fields to be Verified in CROWNWeb

- Date of Reported Dialysis Session: 04/30/2017
- Current Access Type: AV Fistula Combined with a Catheter
- Date Access Type Changed: mm/dd/yyyy
- AV Fistula Usable Date: mm/dd/yyyy
- AV Fistula Maturing: N/A
- AV Fistula State: Active
- AV Fistula Creation Date: mm/dd/yyyy
- AV Graft Maturing: N/A
- AV Graft State: N/A
Next Steps

Aiming for Success
Next Steps
Aiming for Success

• Gain nephrologist and surgeon buy in
• Identify one or two individuals as the vascular access coordinator
  – Organize a face-to-face meeting with surgeons and nephrologists and hospital attending physicians
  – Use or develop a patient level tracker
• Determine if your facility would benefit from a designated cannulation team
• Implement staff audits
• Organize educational in-service
• Data Clean up in CROWNWeb
Resources

Helpful Tools
Long-Term Catheter Reduction Methodology

Patient has a Central Venous Catheter (CVC)

- No other Access
  - No intervention
  - Patient Education
    - Patient refuses
      - Introduce Patient to Patient SME/Peer Mentor
      - Explore PD as an option
      - Explore rationale and reeducate the patient
      - Patient signs the Patient Choice Form
  - Patient refuses

- Patient Choice
  - Check with Patient and Nephrologist re. Plan
  - Make an appointment for vein mapping
  - Schedule vein mapping
  - Follow up weekly until access is placed
  - Access placed

- New Start
  - Schedule follow up appointment with Surgeon

- Maturing Access
  - Does Patient have follow up with Surgeon?
    - Yes: Request order to cannulate
    - No: Confirm adequate function of access
    - Follow facility procedure for cannulating new access
    - Request order for CVC
    - Schedule CVC removal
    - CVC removed
    - Update vascular access in Facility EMR and CROWNWeb
## Long-Term Catheter Reduction Patient Level Tracker

<table>
<thead>
<tr>
<th>Patient Information</th>
<th>Patient Unique Personal Identification (UPI) Number</th>
<th>Date CVC Placed</th>
<th>Why CVC is greater than 90 Days</th>
<th>Vein Mapping Y or N</th>
<th>Date of Vein Mapping</th>
<th>Surgery Date</th>
<th>Type of Access Placed: AVF or AVG</th>
<th>Post Surgery Follow Up Apt. with Surgeon Date</th>
<th>Expected Cancellation Date</th>
<th>Actual First Successful Cancellation Date</th>
<th>Actual CVC Removal Date</th>
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<tbody>
<tr>
<td>Felck Internal Access (i.e. AVF/AVS)</td>
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<td>Not a Candidate: Not Any Other Access</td>
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<td>Patient Chose</td>
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<td>Patient Missed Appointment</td>
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<td>Surgeon Availability</td>
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<td>Other</td>
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Long-Term Catheter Reduction Facility Summary Reports
Long-Term Catheter Reduction Tri-Fold and Poster
Open Discussion

We Want to Hear from YOU!
Questions?
Comments?
For more information:

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