NORTHWEST RENAL NETWORK

ANNUAL REPORT

2012

Submitted to:

Department of Health and Human Services

Centers for Medicare & Medicaid Services

For: Contract Number HHSM-500-2010-NW016C

Submitted to CMS Project Officer/COTR 6/28/13

July 1, 2013
TABLE OF CONTENTS

I. PREFACE...............................................................................................................................v
   A. Mission Statement ........................................................................................................... v
   B. Statement of the Chairperson ......................................................................................... vi

II. INTRODUCTION..................................................................................................................1
   A. Network Description ...................................................................................................... 3
      1. Geography and General Population Characteristics ................................................ 3
      2. State Specific Information ......................................................................................... 5
      3. ESRD Patient Population ........................................................................................... 6
      4. Providers ................................................................................................................... 16
   B. Network Structure ....................................................................................................... 17
      1. Staffing ....................................................................................................................... 17
      2. Boards and Committees ........................................................................................... 19
      3. Network Council - Facility Representatives ............................................................ 21

III. CMS NATIONAL GOALS AND NETWORK ACTIVITIES .............................................21
   A. Improve quality and safety of dialysis related services for individuals with ESRD. ..... 22
      1. Quality Improvement Program .................................................................................. 22
         a. Quality Improvement Projects ............................................................................. 23
         b. Increasing the Use of AV Fistulas (AVF) ............................................................... 26
         c. 100% Lab Data Collection (Elab). ....................................................................... 32
         d. Network Goals ..................................................................................................... 32
         e. Elab Data Graphs .................................................................................................. 33
         f. Dialysis Facility Compare / Dialysis Facility Report ............................................. 33
         g. Quality Incentive Program ..................................................................................... 33
         h. Facility Cooperation with MRB Recommendations ............................................ 33
         i. Failure to Provide Appropriate Medical Care ....................................................... 34
         j. Effectiveness ......................................................................................................... 34
      2. Technical Assistance and Educational Resources ..................................................... 34
         a. Effectiveness ......................................................................................................... 36
      3. Education, Publications and Presentations ............................................................... 36
         a. Network Website .................................................................................................... 36
         b. eBulletins and Fax Blasts ...................................................................................... 37
         c. Publications .......................................................................................................... 37
         d. Presentations ......................................................................................................... 38
         e. Effectiveness ......................................................................................................... 38
   B. Improve quality and safety of dialysis related services for individuals with ESRD. ..... 38
      1. Rehabilitation ........................................................................................................... 38
         a. Network Activities Supporting Vocational Rehabilitation .................................... 41
         b. Other Rehabilitation Activities ............................................................................. 41
         c. Effectiveness ....................................................................................................... 42
      2. Self-Care ................................................................................................................. 42
         a. Effectiveness ....................................................................................................... 42
      3. Patient Input Into Network Activities ....................................................................... 42
         a. Service on Committees ......................................................................................... 42
b. Direct Patient Feedback ................................................................. 43

4. Consumer Education Plan ................................................................. 43
   a. New ESRD Patient Orientation Package ................................. 44
   b. Network Facility Poster ......................................................... 44
   c. Network Newsletter ............................................................... 44
   d. Focused Dissemination of Educational Information .................... 45
   e. eBulletins .............................................................................. 45
   f. Network Website ..................................................................... 45
   g. Patient Educational Meetings .................................................. 45
   h. Direct Consumer Requests ....................................................... 45
   i. Effectiveness ........................................................................... 46

C. Improve patient perception of care and experience of care, and resolve patient’s complaints and grievances. ................................................................. 46
   1. Beneficiary Communication ..................................................... 46
      a. Effectiveness ......................................................................... 47
   2. Patient and Facility Concerns .................................................... 47
      a. Effectiveness ......................................................................... 48
   3. Proactive Activities Aimed at Reducing Patient / Provider Conflict 48
      a. Effectiveness ......................................................................... 51

D. Improve collaboration with providers (and others) to ensure achievement of the goals through the most efficient and effective means possible ................................................................. 51
   1. Community Outreach ............................................................... 51
      a. Effectiveness ......................................................................... 51
   2. Emergency Preparedness and Response ..................................... 52
      a. Kidney Community Emergency Response (KCERO Coalition Participation) 52
      b. Additional Emergency Preparedness and Response Activities 52
      c. Effectiveness ......................................................................... 52
   3. Strategic Partnerships for Change – NW Dialysis Emergency Coalition 52
      a. Effectiveness ......................................................................... 53
   4. Collaboration with Quality Improvement Organizations (QIOs) .... 53
   5. State Survey Agencies ............................................................... 54
      a. Effectiveness ......................................................................... 54
   6. Interaction with Other Organizations Serving ESRD Community .. 54
      a. Effectiveness ......................................................................... 55

E. Improve the collection, reliability, timeliness, and use of data to measure processes of care and outcomes; maintain Patient Registry; and to support the ESRD Network Program ................................................................. 55
   1. Data Forms Processing ............................................................... 55
   2. Forms/Instruction ....................................................................... 55
      a. Effectiveness ......................................................................... 55
   3. Compliance Reports ................................................................. 56
      a. Effectiveness ......................................................................... 57
   4. Annual Facility Survey ............................................................... 57
      a. Effectiveness ......................................................................... 57
   5. Network Data Quality Improvement .......................................... 57
   6. Data Reconciliation Activities ................................................... 58
      a. Effectiveness ......................................................................... 59
   7. Collaboration ............................................................................ 59
8. Supporting Deployment and Maintenance of CMS Software, CROWNWeb ........60
   a. Effectiveness ..................................................................................61
9. Maintenance & Security of CMS Hardware/Software, QualityNet Environment ...62

IV. SANCTION RECOMMENDATIONS ........................................................................62

V. RECOMMENDATIONS FOR ADDITIONAL FACILITIES ........................................63

VI. DATA TABLES ........................................................................................................63
   1. Newly Diagnosed Chronic ESRD Patients 2011 ............................................65
   2. Living ESRD Dialysis Patients, 12/31/2011 ..................................................66
   3. Number of Living Patients by Modality/Self Care 2010/2011 ....................69
   4. Number of Living Patients by Modality/In-Center 2010/2011 ....................81
   6. Renal Transplant Recipients 2011 .................................................................95
   7. Dialysis Patient Deaths 2011 .....................................................................99
   8. Vocational Rehabilitation 2011 ................................................................101

APPENDIX A - Network 16 Provider Facilities ......................................................... A
MISSION STATEMENT

The mission of Northwest Renal Network is to promote optimal dialysis and transplant care for kidney patients in Alaska, Idaho, Montana, Oregon and Washington.
STATEMENT BY THE EXECUTIVE COMMITTEE OF THE BOARD OF DIRECTORS

The Northwest Renal Network (Network) Board of Directors and staff are pleased to submit the 2012 Annual Report to the Centers for Medicare & Medicaid Services (CMS). Network activities support the CMS ESRD Network Program Strategic Goals to improve ESRD patient outcomes.

This report summarizes the Network’s activities conducted towards the CMS goals in the areas of quality improvement, technical assistance, education, community collaboration, beneficiary protection and ESRD data system development activities. It also provides key data regarding patients and providers in Alaska, Idaho, Oregon, Montana and Washington. Highlights for 2012 include:

Quality Improvement
The Network’s annual Quality Improvement Work Plan projects addressed improving AVF maturation rates, reducing long-term catheter rates, increasing incident AVF placement, and assisting dialysis facilities with multiple opportunities for improvement. Additional QI activities included providing AVF peer comparison data to all Network facilities and working with the Oregon Patient Safety Commission on the Oregon Blood Stream Infection Collaborative. The Network also continued to lead the nation in AV Fistula in-use rates.

Community Information and Resources
The Network continued to promote and enhance its technical assistance and website resources for the community including additional tools for beneficiaries, emergency preparedness, and vocational rehabilitation. The Network continued its successful new patient outreach initiative and developed monthly patient educational flyers for distribution to all facilities. The Network’s emergency preparedness coalition conducted a focused emergency preparedness drill and assisted Network facilities with their emergency planning.

Information Management
The Network continued to contribute to testing and provision of technical expertise for the development and national release of the CMS CROWNWeb system. In June of 2012, CROWNWeb was launched nationally. The Network worked with CMS, CMS contractors and Network facilities on trainings and implementation of CROWNWeb. Following the rollout, the Network continued its work troubleshooting issues associated with the National release.

The Board of Directors would like to thank the Network’s consumers, clinical staff and provider facilities for their continued partnership and assistance toward reaching the Network and CMS goals. Specifically, we would like to thank the individuals who volunteer on the Network’s Board of Directors, Patient Advisory Committee and Medical Review Board. Their participation and knowledge is invaluable to the Network’s mission.

Katrina Russell, RN, CNN
Chairperson, Board of Directors
II. INTRODUCTION

Northwest Renal Network (NWRN) is a 501(c)3 non-profit corporation, established in March 1978 to provide End Stage Renal Disease (ESRD) quality of care monitoring services for the federal government. Under contract with the Centers for Medicare & Medicaid Services (CMS), Department of Health and Human Services, the Network provides services to promote optimal dialysis and transplant care for kidney patients in ESRD Network Area #16: Alaska, Idaho, Montana, Oregon and Washington.

All ESRD Networks are required to submit an annual report to the Secretary of the U.S. Department of Health and Human Services. This report covers Northwest Renal Network activities conducted in calendar year 2012 under CMS Contract # HHSM-500-2010-NW016C.

History of ESRD Networks

In October 1972, passage of Section 2991 of Public Law 92-603 created the national ESRD Program that extended Medicare benefits to cover the high cost of medical care for most individuals suffering from end stage renal disease.

Congress enacted modifications of the End Stage Renal Disease Program on June 13, 1978 (PL 95-292) to improve cost effectiveness, ensure quality of care, encourage kidney transplantation and home dialysis, and increase program accountability. This legislation amended Title XVIII of the Social Security Act, by adding Section 1881, which designated 32 ESRD Network areas and established Network organizations, consistent with criteria determined by the Secretary of the Department of Health and Human Services. To help achieve coordinated delivery of ESRD services, representatives of hospitals and health facilities serving dialysis and transplant patients in each area of the country were linked with patients, physicians, nurses, social workers, dietitians, and technicians into “Network Coordinating Councils.” Northwest Renal Network was originally incorporated as Network Coordinating Council #2.

In 1987, Networks were consolidated from 32 service areas into 18; the territory served by Northwest Renal Network was unchanged. The current configuration of ESRD Network Organizations nationwide is illustrated on the following page. Each Network includes representatives of the federally approved ESRD treatment facilities in its region, as well as patients and professionals involved in the delivery of ESRD services.

The Network is responsible for conducting activities in the areas of quality improvement, community information and resources, administration, and information management. The function of the Network is to:

- Provide an efficient organizational framework for improving quality of care
- Identify opportunities to improve care, develop quality improvement interventions, and measure their effectiveness
- Identify and address instances of substandard care including patient safety concerns, and refer to other agencies or organizations as appropriate
- Investigate and resolve patient complaints and grievances
- Coordinate the collection, analysis and reporting of data used in monitoring and evaluating quality of care and for beneficiary entitlement to Medicare coverage
ESRD Network No. 1
Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island

ESRD Network No. 2
New York

ESRD Network No. 3
New Jersey, Puerto Rico, U.S. Virgin Islands

ESRD Network No. 4
Pennsylvania, Delaware

ESRD Network No. 5
District of Columbia, Maryland, Virginia, West Virginia

ESRD Network No. 6
Georgia, North Carolina, South Carolina

ESRD Network No. 7
Florida

ESRD Network No. 8
Alabama, Mississippi, Tennessee

ESRD Network No. 9
Kentucky, Indiana, Ohio

ESRD Network No. 10
Illinois

ESRD Network No. 11
Michigan, Minnesota, Wisconsin, North Dakota, South Dakota

ESRD Network No. 12
Missouri, Iowa, Nebraska, Kansas

ESRD Network No. 13
Arkansas, Louisiana, Oklahoma

ESRD Network No. 14
Texas

ESRD Network No. 15
New Mexico, Colorado, Wyoming, Utah, Arizona, Nevada

ESRD Network No. 16
Alaska, Idaho, Montana, Oregon, Washington

ESRD Network No. 17
Northern California, Hawaii, Mariana Islands, Guam, American Samoa

ESRD Network No. 18
Southern California
A. NETWORK DESCRIPTION

1. Geography and General Population Characteristics

Northwest Renal Network serves the states of Alaska, Idaho, Montana, Oregon, and Washington, which span three time zones and almost one million square miles. Although the Network includes several metropolitan centers, a substantial portion of the general and ESRD population is dispersed in more remote, rural areas. Travel in many areas within the Network is challenging, as some regions have limited access roads and others are often impacted by severe weather events such as ice storms, high winds, and floods. In addition, natural disaster risks in the region include wildfires, earthquakes, tsunami, avalanches, and volcanic eruptions.

The vast geographic size, varying population densities, and constraints on transportation found in this Network impact the size and location of ESRD facilities, and utilization of treatment modality options by ESRD patients. These factors also influence the methods utilized by the Network to disseminate information and conduct quality improvement activities.

The US Census map below illustrates the variation in general population density for counties in this Network area, compared to the rest of the United States. For some breakdowns, census information for 2012 and even 2011 remains unavailable at the time of this writing. The latest available information will be used.

During 2011-2012, population growth in Idaho, Montana, and Oregon fell below the national average of 0.9%, while Alaska and Washington grew faster than the US as a whole.

**FIGURE 2**

% CHANGE GENERAL POPULATION IN NETWORK AREA

<table>
<thead>
<tr>
<th>STATE</th>
<th>2011¹</th>
<th>2012¹</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALASKA</td>
<td>722,718</td>
<td>731,449</td>
<td>1.2%</td>
</tr>
<tr>
<td>IDAHO</td>
<td>1,584,985</td>
<td>1,595,728</td>
<td>0.7%</td>
</tr>
<tr>
<td>MONTANA</td>
<td>998,199</td>
<td>1,005,141</td>
<td>0.7%</td>
</tr>
<tr>
<td>OREGON</td>
<td>3,871,859</td>
<td>3,899,353</td>
<td>0.7%</td>
</tr>
<tr>
<td>WASHINGTON</td>
<td>6,830,038</td>
<td>6,897,012</td>
<td>1.0%</td>
</tr>
<tr>
<td>NETWORK 16</td>
<td>14,007,799</td>
<td>14,128,683</td>
<td>0.9%</td>
</tr>
<tr>
<td>US</td>
<td>311,591,917</td>
<td>313,914,040</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Table: % CHANGE GENERAL POPULATION IN NETWORK AREA

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</table>


Compared to the general population in the US, the general population of the five-state Network area is basically similar, but with relatively more people in the 25-29, 35-39 and 50-64 age groups, and fewer people in the 20-24 and 65-79 age groups, as Figure 3 illustrates for 2012.

**FIGURE 3**


Source: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
2. State Specific Information

Alaska - The Last Frontier

Alaska entered the union in 1959 as the 49th state, and is the largest state, with a land area of 571,951 square miles. Alaska is 2000 miles from the lower states, upon which it depends for a number of specialized healthcare services, including renal transplantation. The topography of Alaska includes mountains, arctic tundra, plateaus, glaciers and impassable rivers. Travel between the more widely dispersed communities is primarily by air or sea. Of the 20 highest peaks in the United States, 17 are in Alaska. Mt. McKinley in Denali National Park is the highest on the North American continent.

Population growth in Alaska from July 2011 to July 2012 was estimated to be 1.2%. Most of Alaska is relative wilderness, and half of the estimated 2012 population lived in the Anchorage metropolitan area. The state-wide population density was only 1.3 persons per square mile in 2012, lowest in the US, compared to an average population density of 88 for the US as a whole.

Oil and gas, fisheries, and mining drove Alaska’s 2011 median household income to $67,800, second-highest in the US and a third higher than the $50,500 national average. Oil and gas accounted for 80% of the state’s economic activity. The unemployment rate in Alaska fell from 7.6% to 7.0% during 2012.

Idaho – The Gem State

Idaho entered the union in 1890 as the 43rd state, and is the 14th largest state in the nation, with a land area of 82,747 square miles. The deepest canyon in North America, Hell’s Canyon at a depth of 7900 feet, is in Idaho. Mainly agricultural, Idaho is also rich in productive mines and primitive wilderness areas.

Much of Idaho’s population is distributed in small communities that may become quickly isolated during the winter due to sudden and severe storms. Two thirds of Idaho is federal land, much of it forest and desert. Idaho’s population increased 0.7% between 2011 and 2012, though not enough to increase the state’s population density at 19 persons per square mile.

At $43,400, Idaho’s 2011 median household income was slightly lower than in 2010. The Idaho economy depends on the electronics industry, agriculture, forestry and related manufacturing, and mining. Idaho’s unemployment rate during 2012 fell from 8.3% to 7.1%.

Montana – The Treasure State

Montana entered the union in 1889 as the 41st state, and is the 4th largest state in the nation, with a land area of 145,552 square miles. Montana contains Glacier National Park, the northern gateway to Yellowstone Park, the northern Rocky Mountains and more than 50 other mountain ranges in the western third of the state. The Continental Divide bisects the state into a milder, wetter maritime climate in the west and a harsher, drier continental climate in the eastern two thirds. The state contains elevated plains, erosion valleys, rivers, desert, and badlands. Harsh weather and forest fires, combined with the
topography, frequently makes travel difficult if not impossible. Many of the state’s highways are closed during heavy snowfall, and air travel may also be restricted due to poor visibility.

Montana is mostly rural. Between July 2011 and July 2012 the estimated general population again increased by 0.7%, not enough to increase the population density above 7 persons per square mile. Montana’s unemployment rate declined from 6.6% to 6.0% in 2012. The economy is driven by agriculture, mining, tourism, and forestry. The state’s 2011 median household income increased to $44,200, $1,500 more than the previous year.

Oregon – The Beaver State

Oregon entered the union in 1859 as the 33rd state, and is the 9th largest state with a land area of 95,997 square miles. The state is divided by the Cascade Mountain Range, with differing climates, the western side being milder and wetter than the more arid land east of the mountains, much of which is desert. Oregon is comprised of metropolitan, suburban, rural, agricultural, forest, and desert areas. Eighty percent of Oregon’s land area was rural in 2000.

Oregon experienced 0.7% population growth between July 2011 and July 2012, with density remaining steady at 40 persons per square mile. Oregon’s unemployment rate declined almost a full percentage point during 2012, from 9.6% to 8.7%. Agriculture, electronics, and fisheries bolster the Oregon economy. While forestry in Oregon is a small fraction of what it was in the previous century, it still leads the US in softwood lumber production. Median household income in Oregon was $46,800 in 2012, slightly higher than in 2011.

Washington – The Evergreen State

Washington entered the union in 1889 as the 42nd state and is the 18th largest state in the nation, with a land area of 66,544 square miles. The state is divided by the Cascade Mountain Range. A milder climate prevails on the western side that includes the Pacific Coast, Olympic Mountains, and Puget Sound. East of the Cascades, the terrain includes plateaus, deserts, and more sparsely populated agricultural areas. Of the 39 counties in Washington, 31 were considered rural in 2000.

Between July 2011 and July 2012 Washington’s estimated population increased by 1.0%, raising population density to 103 people per square mile. The state’s median household income in 2011 was $56,800, a two percent increase over 2010. The Washington economy is driven by airplane, software, and electronics manufacturing, and ranks among the leaders in agriculture, forestry, international trade, and biotechnology. The unemployment rate in Washington was 8.2% at the end of 2012, a full percentage point lower than the beginning of the year.

3. ESRD Patient Population

This section summarizes characteristics of the Network ESRD patient population in regards to dialysis prevalence, ESRD incidence, primary renal diagnosis, treatment modality, age, race, and gender.

Prevalence and Incidence

The Prevalence of a disease or other condition in a population is the number and proportion of
people who have been diagnosed with the condition. Prevalence can be point prevalence, which are the number and proportion at a single point in time, or period prevalence, which is the number and proportion of people who had been diagnosed with the condition at any time during a specified time period. In this report, only point prevalence is utilized. It is traditional in this arena to measure the prevalence of people on dialysis.

Incidence numbers and proportions apply to people newly acquiring a disease or other condition. Incidence always applies to a time period, not to a point in time. Here Networks traditionally use ESRD incidence, or the incidence of permanent kidney failure. Patients new to End Stage Renal Disease either begin dialysis, or receive a transplant immediately without experiencing dialysis. ESRD incidence includes both.

Rates of prevalence and incidence are often tallied not as percentages, but as the number of people acquiring the affliction, per million people in the general population. One percent would equate to 10,000 per million, for example.

A summary comparing 2012 US Census data for each of the five Network states with 2012 dialysis prevalence and ESRD incidence (initiating dialysis or receiving a transplant as first ESRD treatment modality), is presented in Figure 4.

<table>
<thead>
<tr>
<th>STATE</th>
<th>2012 GENERAL POPULATION</th>
<th>NUMBER OF DIALYSIS PATIENTS (1)</th>
<th>DIALYSIS PREVALENCE per million</th>
<th>NUMBER OF NEW ESRD PATIENTS (1)</th>
<th>ESRD INCIDENCE per million</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALASKA</td>
<td>731,449</td>
<td>476</td>
<td>652</td>
<td>115</td>
<td>158</td>
</tr>
<tr>
<td>IDAHO</td>
<td>1,595,728</td>
<td>1,186</td>
<td>741</td>
<td>291</td>
<td>182</td>
</tr>
<tr>
<td>MONTANA</td>
<td>1,005,141</td>
<td>720</td>
<td>720</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>OREGON</td>
<td>3,899,353</td>
<td>3,530</td>
<td>905</td>
<td>908</td>
<td>232</td>
</tr>
<tr>
<td>WASHINGTON</td>
<td>6,897,012</td>
<td>6,244</td>
<td>905</td>
<td>1,592</td>
<td>230</td>
</tr>
<tr>
<td>NETWORK</td>
<td>14,128,683</td>
<td>12,281</td>
<td>860</td>
<td>3,188</td>
<td>221</td>
</tr>
</tbody>
</table>

(1) Data source is Figure 2 above and Tables 1 and 2 in Section VI: Data Tables in this report. Network totals include 125 prevalent dialysis patients and 62 new ESRD patients with residence reported to be in other states. New ESRD patients includes 85 patients whose first modality was transplant.

Prevalent patients – According to CMS Form 2744 in CROWNWeb, 12,281 dialysis patients were being treated by Network facilities as of December 31, 2012, including 77 patients being treated at two Network Veterans Health Administration facilities, and five patients being treated at a military hospital in the Network. One hundred twenty-two prevalent dialysis patients had CROWNWeb addresses outside of the Network’s five-state service area.

Incident patients – 3,171 patients were reported by Network facilities as beginning ESRD treatment in 2012, including 85 patients who began ESRD therapy with a transplant, and 36 patients receiving treatment at Veterans Administration facilities. Fifty-nine incident ESRD patients had CROWNWeb addresses outside of the Network’s five-state service area. While dialysis prevalence continued to increase slowly in most states, ESRD incidence dropped in three of the five Network states. Incidence increased only in Oregon (slightly) and Montana (sharply).
Figures 5 and 6 plot rates of dialysis prevalence and ESRD incidence over time for the US and the five Network states. These two Figures do not include a time series for the Network as a whole, but since Washington makes up half of the Network population and Oregon an additional fourth, the Washington line, with a nod towards the Oregon line when they diverge, is a good surrogate for the Network trend.

**FIGURE 5**

![Annual Rates of Dialysis Prevalence by State, 2003-2012](image)

*Source: Figure 4 above and prior Northwest Renal Network Annual Reports.*

**FIGURE 6**

![Annual Rates of ESRD Incidence by State, 2003-2012](image)

*Source: Figure 4 above and prior Northwest Renal Network Annual Reports.*

**Primary Renal Diagnosis**

Incident patients in the Northwest Renal Network area are more likely to have a primary renal diagnosis ("PRD") of glomerulonephritis than patients in the US as a whole. Both prevalent and incident patients in the Network are much less likely to have a PRD of hypertension. The Network has far more patients outside of the three most common categories of PRD – diabetes, hypertension, and glomerulonephritis. The graph and table in Figure 7 show these differences, comparing the PRD distribution of Network patients to the PRD distribution of patients nationally.
FIGURE 7

Primary Renal Diagnosis of 2012
NWRN and 2011 US ESRD Populations

<table>
<thead>
<tr>
<th>Primary Renal Diagnosis</th>
<th>Diabetes</th>
<th>Hypertension</th>
<th>Glomerulonephritis</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident ESRD Patients 2012 NWRN</td>
<td>44.0%</td>
<td>18.7%</td>
<td>10.3%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Incident ESRD Patients 2011 US</td>
<td>43.9%</td>
<td>27.5%</td>
<td>6.3%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Prevalent Dialysis Patients 2012 NWRN</td>
<td>43.5%</td>
<td>16.4%</td>
<td>8.9%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Prevalent Dialysis Patients 2011 US</td>
<td>44.2%</td>
<td>28.3%</td>
<td>9.0%</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

Source: Tables 1 and 2 in Section VI: Data Tables in this report.

Treatment Modality

A state-by-state comparison of the Network mix of dialysis modalities is presented in Figure 8. As Figure 9 illustrates, Home dialysis continues to increase, reaching 15.3% in 2012, with Idaho and Alaska leading the way. Idaho’s home dialysis rate fell in 2012, however, while Oregon and Alaska gained more than a percentage point each. Washington, once a champion of home dialysis, now trails the other four states. This is the second year in a row that overall Network home dialysis rates have grown by half a percentage point.
FIGURE 8

Dialysis Patient Modalities
as of December 31, 2012, by State

<table>
<thead>
<tr>
<th></th>
<th>AK</th>
<th>ID</th>
<th>MT</th>
<th>OR</th>
<th>WA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Peritoneal</td>
<td>102</td>
<td>276</td>
<td>92</td>
<td>424</td>
<td>641</td>
<td>1,535</td>
</tr>
<tr>
<td></td>
<td>21.3%</td>
<td>23.3%</td>
<td>12.5%</td>
<td>11.7%</td>
<td>10.2%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Home Hemodialysis</td>
<td>4</td>
<td>27</td>
<td>17</td>
<td>89</td>
<td>206</td>
<td>343</td>
</tr>
<tr>
<td></td>
<td>0.8%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.5%</td>
<td>3.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>In-Center Peritoneal</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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</tr>
<tr>
<td>In-Center Hemodialysis</td>
<td>374</td>
<td>880</td>
<td>626</td>
<td>3,115</td>
<td>5,411</td>
<td>10,406</td>
</tr>
<tr>
<td></td>
<td>77.9%</td>
<td>74.4%</td>
<td>85.2%</td>
<td>85.9%</td>
<td>86.4%</td>
<td>84.7%</td>
</tr>
<tr>
<td>Total</td>
<td>480</td>
<td>1183</td>
<td>735</td>
<td>3,629</td>
<td>6,261</td>
<td>12,288</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Tables 3 and 4, Section VI: Data Tables in this report, NWRN 2012 Annual Report.

FIGURE 9

Percentage of Patients Dialyzing at Home, NWRN, 2003-2012

Source: Figure 8 above and prior Northwest Renal Network Annual Reports.
Transplantation

Five hundred ninety (590) transplants were performed at Network transplant centers during 2012. Of these, 412 or 69.8% were from deceased donors, 78 or 13.2% were from living related donors, and 100 or 17.0% were from living unrelated donors. Eighty five incident ESRD patients received a transplant in this Network as their first ESRD treatment modality, without first receiving dialysis – 14.4% of all Network transplants and 2.7% of all incident patients.

Network transplant centers performed 31 more transplants during 2012 than they did in 2011. The number of deceased donor transplants grew by 34 (9.0%), the number of living related donor transplants fell by 7 (8.2%), and the number of living unrelated transplants grew by 4 (4.2%). Since the overall transplant rate grew 5.5% and the year-end dialysis population gained only 4.3%, the overall transplant rate stabilized after an eight-year decline, as shown in Figure 10. The living donor rate continued to decline.

As Figure 11 shows quite clearly, transplants are now performed on older patients much more frequently than earlier in the century.
Age

The average age of prevalent dialysis patients in treatment at Network facilities on December 31, 2012 was 61.1 years, the same as in 2011. The average age at incidence continues to decline, to 61.6 in 2012.

As one would expect, the age of the dialysis population peaks later than that of the general population; Figure 13 compares the two distributions. In 2012, the age distribution of prevalent
dialysis patients reached a peak at 60-64 years; in 2003, there was a relatively level plateau between ages 55 and 79. Dialysis incidence peaked at ages 60-69 in 2012, ten years younger than in 2003. In both the prevalent and incident dialysis populations, there are relatively more patients aged 85+ in 2012 than in 2003.

**FIGURE 13**

![Histograms of 2012 Prevalent Network Dialysis Population Compared to 2012 General Population in Network Area by Age](image)

Sources: Tables 3 and 4, Section VI: Data Tables in this report and Figure 3 above.

**Race**

The racial categories referred to in this report are federally defined. New ESRD patients choose from the categories listed on the form used by Medicare to establish Medicare entitlement at the initiation of chronic treatment for ESRD (CMS Form 2728 - Medical Evidence Report).

The general population of the Network's service area is predominantly white. The largest racial minority group is in Montana, where American Indian and Alaska Natives comprise 24% of the prevalent dialysis population. A broad mix of non-white patients make up almost half of Alaska’s dialysis patients, while Black/African American and Asian patients together comprise 21% of Washington dialysis patients. A comparison of the racial distributions of the general population, prevalent dialysis patient population, and incident ESRD population in each state is shown in Figure 14 below.

**Prevalent patients** – The race distribution for prevalent dialysis patients in the Network at the end of 2012 was 79% White, 9% Black or African American, 7% Asian, 3% American Indian or Alaska Native, and 3% Native Hawaiian or other Pacific Islander.

**Incident patients** – The race distribution of incident ESRD in 2012 was 84% White, 7% Asian, 6% Black or African American, 3% American Indian or Alaska Native, and 2% Native Hawaiian or Other Pacific Islander.

The likelihood of renal failure varies greatly between races and between states in the Network. Figure 14 illustrates that the proportion of Black/African American patients in the prevalent dialysis population was three times the same proportion in the general Network population, and in the incident ESRD population twice times as high. This disparity now spreads across all Network states, with Alaska, Oregon, and Washington all more than three times as high for prevalent patients, and Idaho more than three times as high for incident patients.

In Montana, the proportion of American Indian or Alaska Native patients in the prevalent dialysis population was almost four times the same proportion in the general Montana population, and in
the incident ESRD population more than three times as high. This disparity also occurs to a lesser extent in Idaho.

Though fewer patients are involved, disparity is greatest among Native Hawaiians and Pacific Islanders. The prevalence of dialysis in this group was five times as high as the group’s representation in the general Network population, and the incidence of ESRD four times as high. This disparity was particularly severe in Alaska, where Native Hawaiians and Pacific Islanders in the prevalent dialysis and incident ESRD populations were ten times as common as the same peoples in the general population.

Figures 5 and 6 above show that denizens of the Network’s five states are about two thirds as likely to be members of the prevalent dialysis or incident ESRD populations as people in the US as a whole. For three groups of people in the Northwestern US, though, these odds are reversed –

Native Hawaiians and Pacific Islanders living in Alaska and Washington, American Indians and Alaska Natives living in Montana and Idaho, and Black or African American people living anywhere in the Network.

We cannot say that these groups are worse off in this Network than people of the same heritage living in other Networks, as we do not know the independent impact of their race on their likelihood of developing kidney disease. From the current data we can only say that they are at greater risk than the other inhabitants of this Network.

<table>
<thead>
<tr>
<th>FIGURE 14</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Alaska</th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Population</td>
<td>67.9%</td>
<td>91.9%</td>
<td>89.9%</td>
<td>89.6%</td>
<td>92.0%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Dialysis Prevalence</td>
<td>52.4%</td>
<td>93.2%</td>
<td>72.6%</td>
<td>87.6%</td>
<td>73.6%</td>
<td>78.7%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>62.2%</td>
<td>93.1%</td>
<td>76.9%</td>
<td>90.8%</td>
<td>90.1%</td>
<td>83.5%</td>
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<tr>
<td><strong>Black or African American</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Population</td>
<td>3.6%</td>
<td>0.8%</td>
<td>0.5%</td>
<td>2.0%</td>
<td>3.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Dialysis Prevalence</td>
<td>13.4%</td>
<td>1.4%</td>
<td>1.1%</td>
<td>6.5%</td>
<td>11.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>3.3%</td>
<td>1.4%</td>
<td>0.5%</td>
<td>3.9%</td>
<td>6.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>American Indian and Alaska Native</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>General Population</td>
<td>14.9%</td>
<td>1.7%</td>
<td>6.4%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Dialysis Prevalence</td>
<td>8.7%</td>
<td>3.9%</td>
<td>24.7%</td>
<td>12.2%</td>
<td>1.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>8.9%</td>
<td>2.9%</td>
<td>21.7%</td>
<td>1.2%</td>
<td>1.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>Asian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Population</td>
<td>5.8%</td>
<td>1.3%</td>
<td>0.7%</td>
<td>3.9%</td>
<td>7.5%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Dialysis Prevalence</td>
<td>13.8%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>3.6%</td>
<td>9.4%</td>
<td>6.6%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>8.8%</td>
<td>1.0%</td>
<td>0.5%</td>
<td>3.1%</td>
<td>7.3%</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Native Hawaiian or Other Pacific Islander</strong></td>
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<td></td>
<td></td>
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<tr>
<td>General Population</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Dialysis Prevalence</td>
<td>10.0%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>0.9%</td>
<td>3.4%</td>
<td>2.6%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>12.3%</td>
<td>0.3%</td>
<td>0.5%</td>
<td>0.9%</td>
<td>2.7%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>More than one race selected</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>General Population</td>
<td>7.0%</td>
<td>2.1%</td>
<td>2.4%</td>
<td>3.4%</td>
<td>4.3%</td>
<td>3.8%</td>
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<tr>
<td>Dialysis Prevalence</td>
<td>0.8%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>ESRD Incidence</td>
<td>1.8%</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
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</tbody>
</table>


**Gender**

**Prevalent patients** – In 2012, females accounted for 43% of the Network’s prevalent dialysis patient population. Males represented 57%, slightly below the plateau of the
Incident patients – Females accounted for 41% of the Network’s new ESRD patients in 2012, lower than in recent years. Males represented 59%, equaling the highest rate in ten years.

FIGURE 15

<table>
<thead>
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</thead>
<tbody>
<tr>
<td><strong>FEMALE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalent</td>
<td>44.3%</td>
<td>44.4%</td>
<td>43.3%</td>
<td>42.8%</td>
<td>43.0%</td>
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<td>43.2%</td>
<td>42.9%</td>
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<tr>
<td>Incident</td>
<td>42.6%</td>
<td>42.6%</td>
<td>41.3%</td>
<td>41.9%</td>
<td>42.2%</td>
<td>41.7%</td>
<td>42.5%</td>
<td>41.6%</td>
<td>41.3%</td>
</tr>
<tr>
<td><strong>MALE</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Prevalent</td>
<td>55.7%</td>
<td>55.6%</td>
<td>56.7%</td>
<td>57.2%</td>
<td>57.0%</td>
<td>57.0%</td>
<td>56.8%</td>
<td>57.1%</td>
<td>56.8%</td>
</tr>
<tr>
<td>Incident</td>
<td>57.4%</td>
<td>57.4%</td>
<td>58.7%</td>
<td>58.1%</td>
<td>57.8%</td>
<td>58.3%</td>
<td>57.4%</td>
<td>58.4%</td>
<td>58.7%</td>
</tr>
</tbody>
</table>

Source: Tables 1 and 2 of Section VI: Data Tables in this report, and prior Northwest Renal Network Annual Reports.

Medicare Insured Status

Medicare as a primary insurance covers most of the costs of dialysis treatment and transplant services for individuals, or the dependents of individuals, who meet requirements for Social Security Administration insured status. However, due to Medicare rules that require a patient’s employer group health insurance be primary for the first 30 months of Medicare eligibility, some patients are deferring enrolling in Medicare until the 30-month period has elapsed and Medicare has become the primary payer. Due to the change to facility based reporting of Medicare eligibility in CROWNWeb, the Network has seen a change in Medicare enrollment status. Facilities are reporting either Medicare or Non-Medicare with pending status being underreported for dialysis facilities.

Dialysis

The following graph (Figure 16) shows the Medicare enrollment status by each Network state as of December 31, 2012.

FIGURE 16

Source: 2012 Network Facility Surveys
Transplant

There were 590 patients in this Network who received transplants in 2012; 91.8% were enrolled in Medicare, 1.4% had applications for Medicare pending, and 6.8% were not enrolled in Medicare (Figure 17).

![FIGURE 17](image)

Additional data on the patient population served by Northwest Renal Network facilities in 2012 is presented in data tables included in Section VI of this report.

4. Providers

Figure 18 below shows the distribution of Network dialysis facilities by ownership (or management) category and profit status. LDO is the abbreviation for “Large Dialysis Organization.” CMS determines LDO/non-LDO status.

As of December 31, 2012, there were 175 dialysis facilities and eight transplant centers in the Northwest Renal Network. Of the eight transplant centers, five were operated by non-profit hospitals, two by state universities, and one by the federal Veterans Administration. In the Network during 2012 four new dialysis facilities opened, three in Washington and one in Alaska, while one Oregon facility closed. Two of the new facilities were opened by for-profit LDOs, one by a for-profit national non-LDO, and one by a regional non-profit non-LDO.
During 2012 national for-profit LDOs purchased fifteen formerly for-profit national non-LDO facilities, two formerly hospital-based non-profit facilities, and one formerly non-profit regional non-LDO facility. One facility was divested by a for-profit LDO and changed to for-profit national non-LDO management, one facility changed ownership from one national non-LDO to another, and one non-profit facility changed categories from regional non-LDO to local independent.

At the end of 2012, 70% of Network dialysis facilities were LDO facilities and 30% non-LDO. Almost three fourths (73%) of Network facilities were owned or managed by for-profit organizations and the remaining 27% by non-profit institutions, including the federal government. The latter operates two Veterans Administration dialysis facilities in the Network, and one military hospital that provides chronic dialysis.

FIGURE 18

Ownership and Profit Status of NWRN Dialysis Facilities, 2012

For-Profit (127 Facilities)

Non-Profit (48 Facilities)

Source: Network Records

B. NETWORK STRUCTURE

1. Staffing

Northwest Renal Network staff members are based in Seattle, Washington. Their responsibilities include administration, quality improvement, complaint and grievance investigation and resolution, data collection and analysis, patient and provider education, information dissemination, technical assistance, and collaborative activities with ESRD facilities, local, state and federal government agencies, and other organizations. Network staff as of December 31, 2012 included:
Chad Lennox, MPH - Executive Director - The Executive Director serves as the Chief Executive Officer of the non-profit corporation. The Executive Director reports to the Board of Directors, provides support to the Board related to governance of the corporation and is responsible for overall program management. This position is responsible for business operations and administration, management and oversight of personnel, policy development and implementation, and assuring the fiscal integrity of the Network Organization. As Project Director for the Network’s CMS contract, the Executive Director is responsible for adherence to contract provisions, successful and timely completion of contract deliverables, submission of required project and cost reports, and liaison activities with CMS and other organizations.

Barbara Breckler, BSN, RN - Quality Improvement Director - The Quality Improvement (QI) Director is an experienced nephrology nurse. This position provides support to the Medical Review Board related to quality of care and quality improvement issues, and is responsible for the design and implementation of effective quality improvement projects. Responsibilities include providing technical assistance to individual Network facilities, developing patient and professional education materials for dissemination, developing presentations on special topics and contributing to the larger community in collaborative activities. The QI Director is the clinical liaison with the renal community, CMS, State Survey Agency personnel and Quality Improvement Organizations. This position also collaborates with the Patient Services Coordinator to respond to clinical quality of care inquiries and assists in patient grievance resolution.

Lisa Hall, MSSW, LICSW - Patient Services Director - The Patient Services Director (PSD) is the key contact person for patient and facility staff inquiries from the community regarding quality of care concerns, complaints and grievances, and general information needs such as rehabilitation, quality of life, and end of life planning. Technical assistance is provided in managing challenging situations and accessing resources. Concerns are trended and analyzed to develop targeted activities or educational resources for providers and patients. The PSD reports trends of concerns and grievances to the Medical Review Board and Board of Directors, and serves as a liaison to nephrology social workers at Network facilities.

Sharon Badger, RN - QI / Community Education Coordinator - The QI/CE Coordinator position supports multiple areas of Network activities to improve quality of care and clinical outcomes for people receiving treatment for ESRD. This position focuses on community outreach and collaboration activities of the Network. This position works closely with the Quality Improvement Director and the Patient Services Director. Duties include contributing to the development of quality improvement and community outreach activities, emergency preparedness for facilities/patients and materials for patients and providers, assistance with patient grievances and facility concerns, and collaborative partnership development.

Donna Swenson - Data Manager - The Data Manager is responsible for oversight of Network data management activities. Responsibilities include managing the collection, processing, validation and security of confidential patient and facility-specific information. This position works closely with the Network’s Data/Information Systems Coordinator and administrative support staff involved in data processes. The Data Manager monitors timely and accurate submission of required CMS forms and data by Network dialysis facilities and transplant centers, provides education and technical assistance to facility Data Coordinators regarding CMS requirements, and assists facilities in the development of action plans to improve data reporting compliance. This position assists other Network departments with projects that require access to data files. The Data
Manager was integral to activities related to the implementation phases of CROWNWeb in this reporting period.

**Leah Skrien - Data/Information Systems Coordinator** - The Data/Information Systems Coordinator is responsible for oversight of the Network’s utilization of CMS-provided workstations and server, supervises installation of new hardware and/or software and troubleshoots Network hardware and/or software issues. This position monitors the security of the Network’s QualityNet Environment and adherence to CMS guidelines for security of data, provides staff training on security guidelines, and maintains the Business Contingency and Continuity Plan. This position assists the Data Manager in meeting requirements for data submission, maintenance of confidential information, and supervision of support staff involved in data processes. The Data/Information Systems Coordinator collaborates with other Network staff regarding data needs. The Data/Information Systems Coordinator also was integral to activities related to the implementation phases of CROWNWeb in this reporting period.

**Faye Thibodeaux - Administrative and Project Assistant** – Performs administrative and support activities for all Network staff members. Duties include administrative support to the Executive Director, general office operations, contract related project assistance and coordination of Administrative/Data Assistant activities.

**Shanna Rodarte – Administrative Data Assistant** - Provides support to the Network data department in obtaining and processing complete and timely data from facilities. This position also provides general administrative support for the Network’s operations.

2. **Board of Directors, Committees and Network Council**

The **Board of Directors** is the governing body of Northwest Renal Network, and includes the Officers of the Non-Profit Corporation, the Chairperson of the Medical Review Board, an Informed Consumer (ESRD patient) and four general members. The members of the Board are elected by the Network Council, and efforts are made to seek representation of each Network state. Specific functions of the Board include: acting as the administrative and governing body of the Network; liaison with the federal government; review and approval of any recommendations made by the Medical Review Board with respect to improving the quality of care provided by Network facilities; review and approval of criteria and clinical standards developed by the Medical Review Board; and final review and consideration of any action which will be taken with respect to reporting noncompliant facilities to CMS based upon the results of quality of care or patient grievance investigations.

The 2012 Board of Directors Officers of the Corporation and Members-at-Large as of 12/31/12 included:

**Officers:**
Katrina Russell, RN, CNN; Chairperson
Jean Stevens, RN, MBA; Vice-Chairperson
Gwendolyn Pincomb, MD, PhD; Secretary-Treasurer

**Members at Large:**
John Stivelman, MD; Medical Review Board Chairperson (ex-officio)
Troyce Crucchiola; PAC Liaison
Jessie Pavlinac, MS, RD, CSR, LD; Medical Review Board Vice-Chair (ex-officio)
Peggy Simpson, RN, MS, CNN
Suzanne Watnick, MD
Faye Wong, RN, CNN  
Raghav Wusirika, MD

The **Medical Review Board** (MRB) is an advisory committee to the Board of Directors, composed of individuals qualified to evaluate the quality and appropriateness of care delivered to ESRD patients, and to review patient concerns and grievances which are brought to the attention of the Network. Members of the Medical Review Board are appointed by the Board of Directors and include informed consumers (patients) and representatives from the clinical professions of internal medicine/nephrology, pediatric nephrology, renal transplantation, nephrology nursing, nephrology social work, renal nutrition, and dialysis technology.

Key functions of the MRB include development of the Network’s Quality Improvement Work Plan and Network Goals, as well as monitoring patient outcomes through evaluation of clinical data sets and patient complaints and grievances. Data sets reviewed for comparative performance of Network facilities include the ESRD Clinical Performance Measures and Elab Data Collection Projects, the Fistula First Dashboard, the Dialysis Facility Reports, and other data sources including Standardized Information Management System (SIMS), and investigation of beneficiary complaints and grievances.

The MRB may issue written recommendations to individual ESRD facilities in the Network to address quality of care concerns and request corrective action. It may refer quality of care concerns to the Board of Directors for consideration of recommending sanctions to CMS acting on behalf of the Secretary of the Department of Health and Human Services (DHHS). The Network is also responsible for referral to the state Quality Improvement Organizations (QIO) or Office of Inspector General regarding any information collected while conducting activities that indicates that a physician may be failing to provide quality care or is involved in Medicare fraud. ESRD facility clinical care concerns may also be referred to the State Survey Agency.

The 2012 members of Northwest Renal Network’s Medical Review Board as of 12/31/12 included:

- John Stivelman MD, Chairperson
- Vickie Muchow
- Jessie Pavlinac, RD, MS, Vice-Chairperson
- Richard Parker, MD
- Suhail Ahmad, MD
- Nancy Pierce, BSN, RN, CNN
- Nancy Colobong Smith, MN, ARNP, CNN
- Michael Ryan, MD
- Mary Dittrich, MD
- Byron Roshto, CHT, EMT
- Rob Gordon, MSW
- Timothy J. Stevens, BSN, RN, CCTC
- Roger Gravgaard
- Jordan Symons, MD
- Karen McEwen, RN
- Katy Wilkens, RD, MS

The **Patient Advisory Committee (PAC)** is an advisory committee to the Network. The Network recognizes the essential role of patients in its mission to promote optimal dialysis and transplant care. Their experiences and perspective provide insight to the needs and challenges of the renal community. The primary role of the PAC is to inform the Network and its Board about the needs of patients, to facilitate patient centered-care, and to provide input into Network activities.

The PAC consists of nine patient volunteers and two informed consumer members from the Board of Directors, who serve as liaison between the PAC and the Board. The Network promotes representation on the PAC that is a reflection of the Network’s region and population.
The 2012 members of Northwest Renal Network’s Patient Advisory Committee (PAC) as of 12/31/12 included:

Donna Ayers
John Carter
Troyce Crucchiola (BOD liaison)
Patricia Danielson
Gordon Dutrisac

Elizabeth Kemble
Erik Olsen
Robert Phillips
Quentin Schroeter
Nancy Hewitt Spaeth

In addition to the PAC, patients serve on the Network’s Board of Directors and Medical Review Board. These individuals provide essential feedback and input into the activities and operation of the Network. The patient perspective is critical in the development of effective quality improvement programs, technical assistance tools, patient educational materials, and other Network activities.

3. Network Council - Facility Representatives

The Network Council is comprised of one Facility Representative for each Medicare Certified ESRD Facility or Center in the Network area. The Network Council provides input to Network activities and elects the Network’s Board of Directors. The Facility Representative is responsible to assure their facility participates in Network directed activities as required by the federal Conditions for Coverage (dialysis) and Conditions for Participation (transplant) regulations. The Informed Consumer/patient member of the Board of Directors is also a member of the Council. A list of facilities in operation in the Network area as of December 31, 2012, is located in Appendix A. State-specific information is also available on the Network’s website at: www.nwrenalnetwork.org.

III. CMS NATIONAL GOALS AND NETWORK ACTIVITIES 2010-2012

- Improve the quality and safety of dialysis-related services provided for individuals with ESRD.

- Improve the independence, quality of life, and rehabilitation (to the extent possible) of individuals with ESRD through support for transplantation, use of self-care modalities (e.g., peritoneal dialysis, home hemodialysis), and in-center self-care, as medically appropriate, through the end of life.

- Improve patient perception of care and experience of care, and resolve patients’ complaints and grievances.

- Improve collaboration with providers and facilities to ensure achievement of goals 1 through 3 through the most efficient and effective means possible, with recognition of the differences among providers (independent, hospital-based, member of a group, affiliate of an organization, etc.) and the associated possibilities/capabilities.

- Improve the collection, reliability, timeliness, and use of data to measure processes of care and outcomes; to maintain a patient registry; and to support the goals of the ESRD Network Program.

Northwest Renal Network incorporates the Strategic Goals into the development of activities and projects. The following sections outline activities conducted by Northwest Renal Network in 2011 to achieve the CMS Strategic Goals.
A. GOAL – Improve quality and safety of dialysis related services for individuals with ESRD.

1. Northwest Renal Network Quality Improvement Program

The Network continued to enhance its Quality Improvement Program in 2011. The program incorporates the Quality Improvement Work Plan (QIWP) and Internal Quality Improvement (IQI) activities. The QI Program encompasses identification of opportunities for improvement, analysis of available data sources, prioritization of interventions for maximum impact in an efficient manner and measuring the effectiveness of interventions and activities. Overall program goals are assessed and revised at least annually.

The QIWP encompasses the four primary focus areas of the quality improvement section of the ESRD Networks’ contract Statement of Work. These focus areas for improvement projects are Vascular Access, Clinical Performance Measures, Network level, and Facility specific. The Medical Review Board provides oversight and guidance in the development of the work plan, regularly reviews progress reports on the QI interventions, and revises the plan annually at a minimum. Quality improvement focus areas are determined by analyzing clinical outcomes data within the Network, including the Fistula First Dashboard and database, 100% lab data collection project (Elab), and Clinical Performance Measures. Network or facility specific focus areas may also be identified based on individual or trended patient complaints or grievances, requests for technical assistance from the renal community, referrals from State Survey Agencies, and dialysis facility reports (DFRs).

The IQI program promotes effective and efficient delivery of Network services. It is integrated across the four Task areas of the Network Statement of Work as displayed in the following chart.
a. Quality Improvement Projects

2011-2012 Quality Improvement Projects

The Network’s QI Work Plan was updated in August of 2011. The following section describes project activities conducted in the latter part of 2011 and early 2012, and completed in 2012.

- **Increasing Prevalent-Patient AVF-in-Use Rates**
  Sixty Network facilities with AVF-in-use rates lower than the Network goal were asked to attend an introductory or “kick-off” Web-Ex presentation, and additional presentations on Assessing AVF Maturity, on Creating AVF Fistulas from Forearm Grafts, and/or on Reducing Long-Term Catheters, depending on their AVF-Maturing, AVG, and LTC rates. The Web-Ex presentations can be found at http://www.nwrenalnetwork.org/QI/QI.htm?qip11. Facilities were also given blinded peer-comparison graphs, asked to complete a Root Cause Analysis (RCA) and an Action Plan for increasing their AVF-in-use rates, and provided with additional technical education materials and professional assistance as needed. The Network monitored their maturing AVFs monthly. The goal of the project was to add 1.6 percentage points to the aggregate prevalent-patient AVF-in-use rate at these facilities.

  The Project was successful, adding 1.8 percentage points, while all other Network facilities added only 1.1 percentage points.

- **Increasing Incident-Patient AVF-in-Place Rates**
  A live workshop on increasing AVF-in-Place rates among incident patients was given by AVF Champion Vo Nguyen MD and the Network QID, to clinical staff from eight Network facilities in one state owned by a single provider. These facilities also received peer-comparison graphs and a copy of the Network's new monograph on Meeting the Network’s 60% Goal for AVF in Place among Incident Patients: Best Demonstrated Practices (http://www.nwrenalnetwork.org/Fist1st/IncidentAVF.pdf), and were asked to attend an introductory Web-Ex presentation and an additional Web-Ex on Strategies to Increase Incident-Patient AVF-in-Place Rates (see http://www.nwrenalnetwork.org/QI/QI.htm#qip11 for the Web-Exes). The target facilities completed an RCA and Action Plan, and the Network monitored their progress monthly. The goal of the project was to add three percentage points to the aggregate incident-patient AVF-in-place rate at these facilities. This goal was set to be 50% above trend.

  The Project was successful, surpassing its goal more than six times over, as target facilities added 20 percentage points. Non-target facilities added two percentage points.

- **Decreasing Long-Term Catheter Rates**
  Sixteen Network facilities with LTC rates much higher than the Network goal were asked to attend an introductory or “kick-off” Web-Ex presentation and an additional presentation on Reducing Long-Term Catheters. The Web-Ex presentations can be found at http://www.nwrenalnetwork.org/QI/QI.htm#qip11. Facilities were also given blinded peer-comparison graphs, asked to complete a Root Cause Analysis (RCA) and an Action Plan for reducing their LTC rates, and provided with additional technical education materials and professional assistance as needed. The Network monitored their progress monthly. The goal
of the project was to trim one percentage point from the aggregate LTC rate at these facilities.

The Project met 80% of its goal, as it trimmed 0.8 percentage points from the aggregate LTC rate at target facilities. Since all other Network facilities reduced their aggregate LTC rate by only 0.1 percentage points, the Project was successful, just not as successful as planned.

- **Improve Quality of Care at Facilities with Multiple Opportunities for Improvement**

Four Network facilities were chosen for this Project because they failed to meet Network goals on three or more Clinical Performance Measures (CPMs). The Network QID met with each facility’s chief clinical personnel and Quality Improvement Committee, to assess needs and provide technical assistance. Each facility was asked to attend a Web-Ex presentation on *Understanding and Applying QAPI in Everyday Practice*, which can be viewed at http://www.nwrenalnetwork.org/QI/QI.htm#qip11. Facilities were also asked to complete an RCA and an Action Plan for improving one CPM of their choice, and provided with additional technical education materials and professional assistance as needed. The Network monitored their progress monthly. The goal of the project was for each facility to move their chosen CPM one percentage point in the positive direction.

The Project was successful, as every facility met its goal.

**2012 Quality Improvement Projects**

The Network’s QI Work Plan was updated again in August of 2012. The following section describes project activities conducted and completed in the second half of 2012. The 2011-2012 Network contract with CMS was extended to cover the last half of 2012, in order to begin new CROWNWeb-oriented contracts in January 2013. Since the time interval for QI interventions was shortened, the 2011-2012 QI Projects were adjusted and continued during the last half of 2012.

- **Increasing Prevalent-Patient AVF-in-Place Rates**

Thirteen Network facilities with AVF-in-place rates lower than the 68% Network goal were asked to submit a Root Cause Analysis (RCA) and an Action Plan for increasing their AVF-in-place rates, asked to attend Web-Ex presentations on *Assessing AVF Maturity*, and on *Creating AVF Fistulas from Forearm Grafts*, and provided with additional technical education materials and professional assistance as needed. The Network monitored their maturing AVFs monthly. The goal of the project was to see improvement at five of the thirteen facilities, or 38% of the facilities.

The Project fell short of its goal, as only four facilities demonstrated improvement. However, 57% (4 of 7) of reporting facilities improved, as six of the facilities did not submit enough information to know whether they improved or not, and since the Fistula First database had been discontinued and CROWNWeb was not complete, self-reported data was the only data available. The Network believes that the additional workload of converting to CROWNWeb prevented these facilities from giving the QI Project the attention it otherwise deserved.

- **Increasing Incident-Patient AVF-in-Place Rates**
Three facilities in medium-sized communities with low incident-patient AVF-in-place rates were asked to complete an RCA and Action Plan, asked to attend relevant Web-Ex presentations, provided a variety of technical education material, and offered assistance as needed from the Network QI staff. The Network monitored their progress monthly. The facilities were chosen because the comparable 2011-2012 Project seemed to show that improvement was more difficult in larger communities, perhaps because the Project required coordination between different medical fields, and in small and medium-size communities, personnel in the various fields were more likely to already know, or know of, one another. The goal of the project was to see improvement in at least one facility.

All target facilities took the Project seriously and participated fully. One facility did improve their rate, thus meeting the goal. Because the Project spanned a short timeframe, and because improving these rates even in the best of circumstances is not quick because of surgeon schedules and the small numbers of incident patients over short timespans, it was not an easy goal.

### Decreasing Long-Term Catheter (LTC) Rates
Nine Network facilities with LTC rates continuing to be higher than the Network goal were asked to attend a Web-Ex presentation on Reducing Long-Term Catheters, asked to complete an RCA and an Action Plan for reducing their LTC rates, and provided with additional technical education materials and professional assistance as needed. The Network monitored their progress monthly. The goal of the Project was for three of the nine facilities (33%) to reduce their LTC rate.

The Project goal was not met, as only two facilities demonstrated reduction in their LTC rate. However, only five facilities submitted enough information to be able to identify changes in the LTC rate and no other sources were available, so 40% of reporting facilities did improve. At many of these facilities, the remaining LTC patients are not medically suitable for other access types, so changes in their LTC rate are determined mostly by patient turnover.

### Improve Quality of Care at Facilities with Multiple Opportunities for Improvement
Three Network facilities were chosen to continue in this Project because they were not meeting Network goals on additional Clinical Performance Measures (CPMs). Each facility was asked to attend a Web-Ex presentation relevant to their situation, asked to complete an RCA and an Action Plan for improving their QI skills and improving one CPM of their choice, asked to provide QI-meeting minutes for review by Network staff, and provided with additional technical education materials and professional assistance as needed. The Network monitored their progress monthly. The goal of the project was for at least one facility to improve their chosen CPM.

The Project was successful, as one facility met its goal. A second facility was uncooperative, and the third did not submit enough information to be able to tell whether their goal was met. The uncooperative facility is now managed by new personnel, and as of May 2013, the rate of improvement in their CPMs has been spectacular.

b. Increasing the Use of AV Fistulas (AVF),
Fistula First Breakthrough Initiative (FFBI)

The FFBI is a collaboration of the Centers for Medicare & Medicaid Services (CMS), ESRD Networks and the renal community. The primary goals are to increase the likelihood that every eligible patient will receive the most optimal form of vascular access for that patient (in the majority of cases an AVF), and that vascular access complications will be avoided through appropriate access monitoring and intervention while reducing central venous catheters.

At the Network level, in 2012, the Network focused on quality improvement projects, and educational programming to staff, patients, and physicians. The Quality Improvement Department monitored vascular access outcomes at all Network facilities on a monthly basis while Fistula First data was available, and on QI Project target facilities after that, and provided feedback data to participating facilities.

The CMS national goal for percentage of patients with AVF in use among prevalent patients was 66% by June 30, 2011. The NWRN goal established by the Medical Review Board is 68%. This Network’s prevalent AV Fistula rate continued to be well above the national average of 57.5% during 2012. In the final Fistula First measurement, for April 2012, the Network goal was met and exceeded, with 68.8% of prevalent hemodialysis patients using AVFs. As of May 2013, with 91% of hemodialysis patients counted, CROWNWeb shows the December 2012 AVF-in-use rate to have been 68.6%.

Vascular Data Collection / Comparative Progress Reports

Data collection and measurement of access types in use in the patient population were obtained monthly during January-April 2012 via two distinct processes.

1. The Large Dialysis Organizations (LDOs), as defined by CMS, electronically transmitted AV fistula information directly to the central data repository. The LDOs in this Network included all facilities owned or managed by Fresenius Medical Care, DaVita, and Dialysis Clinics, Inc. LDOs made up approximately 70% of Network facilities at the end of 2012.

2. The non-LDO organizations provided monthly data which was entered by Network staff into the SIMS database. Non-LDOs made up about 30% of Network facilities at the end of 2012. This information was then combined with data submitted electronically by the LDOs and a monthly national report was generated by a CMS contractor to report fistula rates for each Network, the “Fistula First Dashboard.” The Network was able to access the database behind this Dashboard to monitor performance at individual facilities.

Since the Fistula First database was discontinued in May 2012, the Network was able to obtain vascular access data only by querying individual facilities. The CROWNWeb data system monitors and reports vascular access data, but as of May 2013 it contains access information on only 91% of Network hemodialysis patients. However, CROWNWeb is able to produce the kinds of reports that the Network needs for monitoring vascular access, so as the last 9% of patients are entered, data summaries will be readily available.

Vascular Access QI Projects – The Network had several projects impacting vascular access in various stages of intervention or follow up during 2012. These are described in more detail in section 1.A earlier in this Report, and in last year’s Annual Report, and included:
- Increasing Incident-Patient AVF-in-Place Rates (2011-2012 and 2012)
- Decreasing Long-Term Catheter Rates (2011-2012 and 2012)
- Improving Quality of Care at Facilities with Multiple Opportunities for Improvement (2011-2012 and 2012)

Spread Concept
The Institute for Healthcare Improvement, which worked with the Networks on the initial National Vascular Access Improvement Initiative (NVAII), provided training and tools to implement spread. NVAII is now known as the Fistula First Breakthrough Initiative (FFBI). Network 16 has been an integral part of the NVAII/FFBI since its inception, not only achieving the highest AV fistula rates in the country, but sustaining those rates over time.

Publications and Education: Refer to Section 3 - Education, Publications and Presentations later in this report, which includes detailed information on activities related to Fistula First.

Vascular Access Outcomes

In this section we use the abbreviations AVF as a shortcut for ArterioVenous Fistula, AVG for ArterioVenous Graft, and LTC for Long-Term Catheter, or a catheter which has been in use for more than 90 days with no other access in place.

Note that the formal definition of AVF is slightly different in 2012 CROWNWeb data, from its definition in 2011 and earlier Fistula First data. CROWNWeb defines an AVF as a Fistula in use with two needles. The definition was ambiguous under Fistula First, and early in 2012 the Network observed that different dialysis providers were using slightly different definitions for AVF.

The histograms in Figure 19 illustrate the change between December 2011 and December 2012 in the distribution of facility AVF rates for Network 16 hemodialysis patients. The mode has increased from 65-70% to 70-75%. The 2011 data source is the Fistula First database, and for 2012, CROWNWeb. At the time of this writing, 157 Network facilities (of the 165 facilities that had more than ten hemodialysis patients) had vascular access data complete enough to be included in the 2012 graphs.

FIGURE 19
Figure 20, below, shows the Network’s AVF-in-use rate at the end of the year for the span from the beginning of the Fistula First program in 2002 through 2012, by state, for prevalent hemodialysis facilities at all reporting facilities in each state. The graph shows solid two-year increases in Idaho, Montana, and Washington, a serious drop in Alaska, and no progress in Oregon. While we’ve omitted 2011 and other odd years from the graph in order to save space, Oregon facilities led the Network in 2011 at just over 70% AVF in use, so they’ve actually declined over 2012.

FIGURE 20

One of the more important measures of progress toward Fistula First is the AVF-Maturing rate, which measures patients who have an AVG or LTC in use, but a maturing AVF in place. Notwithstanding facilities with problems getting AVFs to mature, this rate provides insight on what next year’s AVF-in-use rate is likely to be. In order to maintain the year-to-year Network-level increases shown in Figure 20, the Network has maintained an AVF-Maturing rate near 8%. Except for Alaska, as Figure 21 shows, this rate dropped sharply in 2012, suggesting that the Network AVF rate may drop in 2013.

FIGURE 21
Almost all of the Network's vascular access Quality Improvement work in 2012 was devoted to a relatively small number of facilities with low AVF-in-place rates or high LTC rates. In the past, the Network has sent peer-comparison graphs to every facility, showing where they stand in relation to other facilities in their region. These graphs have been shown to help improve rates at moderately-performing facilities, and helping to keep relatively well-performing facilities from allowing their AVF rates to slide backwards very far – which all AVF rates do naturally because of normal patient turnover. Because of a staff shortage, the Network was unable to send peer-comparison graphs in 2012. That omission, along with the distraction of the CROWNWeb implementation, may have contributed to this precipitous decline.

As Figure 22 shows, most of the Network's steady progress in increasing AVF-in-use rates between 2003 and 2008 occurred because of a steady decline in AVG rates. From 2008 until 2011, gains in AVF use were made primarily by reducing use of both short-term and long-term catheters. As discussed in the previous paragraph, that trend turned sharply in 2012, as relatively fewer new AVFs were placed in patients using catheters. Changes in AVF-in-use definition would not contribute to this shift, as they would increase the AVF-maturing rate, to the extent that the two-needle definition could potentially delay an AVF being counted as in use.
After many years of falling, as Figure 23 below shows, AVG rates are still declining in Montana and Idaho, while increasing in Alaska and Oregon and holding steady in Washington. Graft data for the US was unavailable in Fistula First results.

For prevalent hemodialysis patients using a catheter for more than 90 days with no other access in place (“long-term catheters,” or “LTC”), in Figure 24, Montana continues to stand out. Alaska and Idaho continue to reduce their use of LTC, while the sharp increase we saw in Figure 22 and in the NWRN group below occurred in Washington, Oregon, and Montana. National LTC rates were not readily available under Fistula First.
Changes in facility-level LTC rates between year-end 2011 and year-end 2012 are seen in Figure 25 below. The mode rose in number – and declined in quality of care, as patient using LTC have much higher morbidity and mortality than patients AVF or AVG – from 0-2% to 6-8%, representing a serious deterioration in this important measure. While during 2012 the Network’s Quality Improvement Projects did focus on LTC at facilities with high LTC rates, progress with that group of facilities was less than outstanding because of high barriers to improvement, primarily patients without suitable vasculature and the absence of well-trained surgeons in the facility’s vicinity. The Network’s 2012 Quality Improvement efforts did not focus on LTC at facilities with low LTC rates, which in retrospect proved unfortunate, as the LTC rates at these facilities migrated upward.

At the time of this writing, data were not available on incident patient AVF rates, nor on comparisons of vascular access rates across Networks.

c. 100% Lab Data Collection (Elab)
During January to April 2012, all Networks participated in the national 100% lab data collection project in collaboration with ESRD Network 11. CMS had the Clinical Performance Measures project on hold during the transitional phases of CROWNWeb, and has directed that the Networks utilize the Elab project as an alternate. The 100% Lab Data Collection has now become part of the CROWNWeb process. Because the 100% Lab Data Collection and the Clinical Performance Measures Projects illuminate the same underlying clinical data, data points from the 2012 100% Lab Data Collection and CROWNWeb have been plotted on the same historical graphs as the CPM data.

d. Network Goals

The Network’s Medical Review Board approved the following goals based on a review of

**FIGURE 27**
**Elab and CPM Review: Network Goals 2012**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Network 16 Goals for 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dialysis Adequacy</strong></td>
<td></td>
</tr>
<tr>
<td>% In Center Hemodialysis and Pediatric Pts with mean spKt/V 1.2 or more</td>
<td>≥ 98%</td>
</tr>
<tr>
<td>% Peritoneal Dialysis Pts with Kt/V 1.7 or more</td>
<td>≥ 96%</td>
</tr>
<tr>
<td><strong>Vascular Access</strong></td>
<td></td>
</tr>
<tr>
<td>% Prevalent Pts with AVF in Use</td>
<td>≥ 68%</td>
</tr>
<tr>
<td>% AV graft Pts with stenosis monitoring</td>
<td>100%</td>
</tr>
<tr>
<td>% Prevalent Pts with catheter 90 days or more</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td><strong>Anemia Management</strong></td>
<td></td>
</tr>
<tr>
<td>% Pts on ESA with mean hemoglobin 12.0 g/dL or more</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Serum Albumin</strong></td>
<td></td>
</tr>
<tr>
<td>% Pts with mean serum albumin 4.0/3.7 (BCG/BCP) or more</td>
<td>≥ 45%</td>
</tr>
</tbody>
</table>

Clinical Performance Measures (CPM), Fistula First data, Quality Incentive Program benchmark levels and the Elab Project for 2012.

e. Elab Data Graphs
The Clinical Performance Measures Projects ("CPM," 1993-2006) and the 100% Lab Data Collection Project ("Elab," 2007-2011) illuminated the same underlying clinical data. These data are now collected in CROWNWeb, with the intention that the time series be continuous. However, the necessary CROWNWeb reports and data integrity verifications are not complete, so historical comparisons will have to wait till next year.

**f. Dialysis Facility Compare/Dialysis Facility Report**

In November 2012, the Network posted to its website, and emailed all dialysis facilities a monograph that explained the relationship between Dialysis Facility Compare (DFC), Dialysis Facility Reports (DFR), and the Quality Incentive Program (QIP) Performance Score Reports (PSR).

Follow-up outreach was made to those facilities that did not access their DFR reports via www.dialysisreports.org website, reminding them to review their DFR and post their PSC. Relevant technical resources were sent to facilities that did not receive full reimbursement under the QIP, along with offers of whatever Network assistance might be useful to them.

**g. Quality Incentive Program**

Some Network facilities received reimbursement deductions for adequacy (URR) and hemoglobin >12 in the most recent QIP. Seven facilities received a two percent reduction for adequacy, and three of these facilities scored zero out of ten for two years in a row. Two of the four facilities that received two of ten for adequacy in the current QIP improved from zero the prior year. One facility received a two percent reduction for hemoglobin >12. Six facilities received a 1.5% reimbursement deduction for adequacy, with only one of those facilities having the same reduction for two years in a row. Six facilities received a one percent reimbursement deduction for adequacy, and two of these improved from a 1.5% deduction the previous year. The Network offered technical assistance to all facilities that received reimbursement deductions.

This QIP information is based on data from calendar year 2011. QIP data has not been finalized for calendar year 2012 at the time of this report.

**h. Facility Cooperation with MRB Recommendations**

The majority of facilities in Network 16 usually cooperate with Network requests. All requests from the Patient Services Director had appropriate facility responses. Quality initiatives had reasonable cooperation from facilities except for the instances listed below:

- **Project 1c. Long Term Care:** one facility returned only 25% of what was requested of them.
- **Project 1a. AV Fistula Rate:** four facilities returned less than half of what they were asked to return, two facilities returned 30-40% of requested items, and two others returned less than 30%. Both of the facilities that were below 30% are now under new management.

When a facility does not participate fully in Network activity, phone calls and emails are placed to the facility and their corporate representatives, reinforcing their requirements under the Conditions for Coverage to participate in Network activities. The Network MRB Chair is notified of uncooperative facilities.
i. Failure to Provide Appropriate Medical Care

Due to geographic scale, number of facilities, and available resources, the Network must utilize what information is available to determine appropriateness of medical care provided at Network facilities as best it can. To Network’s knowledge – based on available state survey results, performance improvements at facilities with multiple opportunities, and results from grievance referrals to the state survey agencies – no Network 16 facilities provided inappropriate medical care in 2012.

No facilities in Alaska, Idaho, or Montana were put on an action plan or track to decertification in 2012. During the year Oregon state surveyors placed four facilities on the track for decertification, and all four probations were rescinded after corrective actions by the facilities. Washington state surveyors placed one facility on the track for decertification in 2012, which was rescinded after corrective actions by the facility.

The Network referred four grievance cases to state survey agencies in 2012 with potential medical care concerns. In two cases surveyors were unable to substantiate the grievance, and no citations were issued. The other two facilities did receive citations, but had plans of correction that were accepted. Three complaints submitted to the Washington state hotline were also investigated. Two were not substantiated while the third found the allegation to be true, but the missing medical course was not necessary.

Several Network facilities with multiple opportunities for improvement were included in quality improvement projects during 2012. All met project goals and improved their CPMs.

j. Effectiveness

With all the Network Quality Improvement projects and activities, the Network follows a continuous quality improvement model. Results from the projects are compared against the baseline and/or a comparison group to determine if the interventions have been effective. Following evaluations, changes are made if necessary and the results are reevaluated. This process continues throughout the project until the desired outcome is reached or the project ends. As shown earlier in this section, the majority of the Network’s QI Projects were deemed effective according to this methodology.

2. Technical Assistance and Resources

The Patient Services, Quality Improvement, and Data Departments are available to provide technical assistance to facilities and professionals. The number of technical assistance requests varies during the course of the year.

The following sections include graphs and additional discussion. Network assistance to facilities during the severe winter weather in the 1st quarter of 2012 contributed to the rise in QI contacts (Figure 35).

FIGURE 35
Facilities and professionals contact the Quality Improvement and Patient Services Departments regarding a number of issues and topics. The graph below (Figure 36) summarizes all facility contacts into categories. The graph only lists the primary reason for contact. In the majority of cases, most facility contacts can be primarily classified as requests for Technical Assistance. The graph illustrates this point. The most frequent technical assistance requests were for assistance with Quality Improvement, though in the 4th quarter of 2012 the primary reason for contact was abusive, disruptive or noncompliant patients. Requests for assistance with challenging patients and requests for educational information were also common categories.

In addition to the individual requests for technical assistance, the Network also provided technical assistance to the renal community. Examples include presenting issue specific presentations to facilities, publishing two patient newsletters, developing/distributing Vocational Rehabilitation and Emergency Preparedness Toolkits, and providing assistance with registration for CROWNWeb.

FIGURE 36
a. Effectiveness

Because the Network tracked the volume of calls as well as the category of calls, we were able to determine the effectiveness of our outreach activities. The Network observed increased facility contact following an activity such as educational or quality improvement mailings and presentations. In addition, the Network was able to see if there was a change in the category of call following an education campaign. If there was not a change, the Network assessed the root cause and developed additional methods of outreach. The educational initiatives that received the most follow up contacts to the Network for technical assistance and/or requests for duplication of the materials were the VR Toolkit and the Emergency Preparedness Toolkit.

3. Education, Publications and Presentations

a. Network Website

The Network’s website resources include patient education, regional facilities, a link to the Dialysis Facility Compare website, the Network’s complaint and grievance procedure, links to affiliated organizations, technical resources, information on the Fistula First Breakthrough Initiative and the Network’s outcomes on increasing the use of AV Fistulas, FDA safety alerts, State Agency contact numbers, state and federal government resources for patients, resources available for home dialysis and rehabilitation, a job posting site for facilities, and Network-specific outcomes data. The website can be found at www.nwrenalnetwork.org. The Network website averaged more than 440 unique visits per day during a typical 2012 month (May). The website is Section 508 compliant for accessibility.
The Network’s Fistula First section was the most often used, with an average of over 75 visits per day in a typical month. The most popular document in this section was the Network’s buttonhole slide show, *Buttonhole Technique for Cannulating AV Fistula*, which was viewed more than eight times on the average day. The Patients’ section was visited more than forty times per day, while the Conditions for Coverage, News Bulletins, and Quality Improvement sections all averaged between twenty and thirty visits per day. The Facilities Planning, Information Management, Summary Statistics, Emergency Preparedness, and Annual Report sections all saw between ten and twenty visits per day. The Network’s well-known seven-year-old “Water Manual,” *Monitoring Your Dialysis Water Treatment System*, was still being downloaded more than 50 times per day.

b. eBulletins and Fax Blasts

The Network maintains a listserv with about 700 subscribers, directed to consumers, professionals, administrators, and others. The Network issues short news bulletins on new educational materials, consumer resources, Network activities, clinical resources, product recalls and FDA alerts, emergency preparedness, AVF promotion, educational opportunities, and other issues of interest to the renal community. The listserv allows the Network to communicate and provide educational services to consumers comfortable with technology. The listserv also supports and supplements the other educational activities of the Network by allowing the Network to announce new resources, draw attention to its other educational efforts (such as newsletters), communicate with the renal community rapidly and provide an avenue to distribute information in an efficient and effective manner.

A new series of monthly patient flyers was added in October 2011 and continued throughout 2012. Featured topics included *Medicare Part D; Holiday Menu Tips; and A Patient Guide to Machine Alarms*. These flyers are designed for posting in the facility waiting area, and for distribution to patients and family members, and are archived at [http://www.nwrenalnetwork.org/P/M/Monthly.htm](http://www.nwrenalnetwork.org/P/M/Monthly.htm).

In addition, urgent safety alerts or other notifications are issued immediately via a fax blast directly to all Network facilities. A complete listing of 2012 email bulletins and fax blasts can be found at [http://www.nwrenalnetwork.org/news_bulletins.htm](http://www.nwrenalnetwork.org/news_bulletins.htm). In early 2013, the Network’s email bulletin series was converted to a blog. You may subscribe at [http://nwrnbulletins.wordpress.com/](http://nwrnbulletins.wordpress.com/) by clicking on the “Follow” button in the lower right-hand corner and entering your email address.

c. Publications

“Nancy Spaeth’s Story: A Little History and a Lot of Hope” by Lisa Hall and PAC member Nancy Spaeth was published in the Vol. 38, Winter 2012 issue of *The Journal of Nephrology Social Work*.


d. Presentations
During 2012, Network staff attended and actively participated in local, regional and national meetings which provided an opportunity to inform facility staff, patients, and other members of the ESRD community about the Network, its role in the ESRD program, and current quality improvement activities. Examples of presentations included speaking to renal social workers about the ICH-CAHPS; presenting on Conflict Management, Boundaries, and Emergency Preparedness to ANNA Chapters; and speaking on Coalition Building at NKF’s Annual Meeting.

e. Effectiveness

Northwest Renal Network was an effective communicator of information to patients, providers and the community. Network information and staff were sought out as a source of education and technical assistance. This was evidenced by the volume of individuals on our eBulletin list, the number of visits to our website, and the sheer number of presentation requests that the Network staff received.

B. GOAL- Improve independence, quality of life, and rehabilitation for individuals with ESRD.

As stated in the mission statement, the Network strives to promote optimal care for individuals with ESRD. Optimal care not only includes safe and quality care, but must also include efforts to improve patient independence, quality of life, and rehabilitation. Therefore, the Network conducts focused activities to improve access to vocational rehabilitation, self-care modalities, and transplant, and participates in special projects promoting improvement of quality of life.

1. Rehabilitation

The Network collects data annually from each dialysis facility regarding vocational rehabilitation activities (see 2012 Vocational Rehabilitation Table #8 in the data tables in Section VI). Each dialysis facility is required by CMS to report the following information:

- Number of patients between the ages of 18 – 54 who are receiving vocational rehabilitation services
- Number of patients between the ages 18 – 54 who are employed full or part-time
- Number of patients between the ages of 18 – 54 who are in school full or part-time
- Number of dialysis facilities that offer a dialysis shift after 5:00 pm

Figure 37 below shows the trending in these areas from 2004 – 2012. Data submitted in the Annual Facility Survey indicates that the total percentage of patients either receiving VR services, employed, or in school dropped significantly. The 2012 Facility Survey was the first that facilities were required to complete via CROWNWeb.
Figure 38 below shows the trending for vocational services from 2004 – 2012. The State of Idaho reported unusually high referral numbers for 2004 through 2006. During 2006, the Network determined that the State of Idaho administers a Kidney Disease Program, which assists patients with insurance premiums and medication costs, through the State Department of Vocational Rehabilitation. Therefore, some of the facilities in the state had been including those patients participating in the Kidney Disease Program in the data reported to the Network. These patients may or may not have actually received any vocational services.

During the collection period for the 2007 data, Idaho facilities were directed to carefully review the reporting guidelines for the annual survey. Likely as the result of this effort, Idaho facilities reported in 2007 a percentage of referrals for vocational rehabilitation services that was more similar to the information reported from facilities in other states.
The Network has continued to provide further written guidance for Idaho facilities in addition to the standard CMS instructions.

Data submitted by facilities for Alaska, Idaho and Montana indicate significant drops in the percentage of patients receiving vocational rehabilitation services. Oregon and Washington appear to be slightly lower as well. The 2012 Facility Survey was the first that facilities were required to complete via CROWNWeb.

The percentage of patients engaged in VR services in 2011 increased for Alaska (up 1.3%) and Montana (up 1.2%). Idaho, Oregon, and Washington each had a slight decline (down less than 1%).

Figures 39 and 40 below show the trending in employment percentage for this age group from 2004-2012. Facilities in each of the Network’s states reported a decrease in the percentage of patients employed. Facilities are responsible for submitting accurate data in the Annual Facility Survey. 2012 was the first year that facilities submitted this data via CROWNWeb.

**FIGURE 39**

<table>
<thead>
<tr>
<th>Year</th>
<th>Alaska</th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>25.00%</td>
<td>22.70%</td>
<td>29.95%</td>
<td>26.61%</td>
<td>26.72%</td>
</tr>
<tr>
<td>2005</td>
<td>21.36%</td>
<td>31.53%</td>
<td>28.28%</td>
<td>26.86%</td>
<td>29.99%</td>
</tr>
<tr>
<td>2006</td>
<td>27.27%</td>
<td>30.80%</td>
<td>23.56%</td>
<td>24.97%</td>
<td>31.84%</td>
</tr>
<tr>
<td>2007</td>
<td>23.62%</td>
<td>28.19%</td>
<td>26.80%</td>
<td>25.58%</td>
<td>31.07%</td>
</tr>
<tr>
<td>2008</td>
<td>40.00%</td>
<td>26.52%</td>
<td>23.42%</td>
<td>27.54%</td>
<td>29.38%</td>
</tr>
<tr>
<td>2009</td>
<td>30.60%</td>
<td>20.54%</td>
<td>26.91%</td>
<td>24.78%</td>
<td>27.37%</td>
</tr>
<tr>
<td>2010</td>
<td>26.80%</td>
<td>20.83%</td>
<td>22.97%</td>
<td>24.87%</td>
<td>23.98%</td>
</tr>
<tr>
<td>2011</td>
<td>23.18%</td>
<td>19.64%</td>
<td>22.84%</td>
<td>22.75%</td>
<td>26.42%</td>
</tr>
<tr>
<td>2012</td>
<td>10.69%</td>
<td>13.71%</td>
<td>12.99%</td>
<td>14.54%</td>
<td>17.97%</td>
</tr>
</tbody>
</table>

Source: Annual Facility Survey

**FIGURE 40**
Overall, analysis of the vocational data for Network 16 indicates a significant decrease in VR outcomes for the Network as a whole, with a drop from 30.67% to 19.50% of patients engaged in VR, working, or attending school. Facilities are responsible for submitting accurate data in the Annual Facility Survey. 2012 was the first year that facilities submitted this data via CROWNWeb. For facilities that submitted that “zero” of their eligible patients were engaged in VR, work, or school, the Network called to validate the data – and determine whether the person completing the survey had coordinated their responses with the social worker.

a. Network Activities Supporting Vocational Rehabilitation

Vocational Rehabilitation Toolkit

The Network provides a Vocational Rehabilitation Toolkit to every facility in its Network. The toolkit contains materials and resources to assist facilities in their vocational rehabilitation efforts. The toolkit is revised on a yearly basis in response to the needs of the renal community. Each revision of the toolkit may contain new materials related to a particular area of focus.

The 2012 Vocational Rehabilitation Toolkit contained materials directed to both social workers and patients designed to increase awareness and utilization of Vocational Rehabilitation. Materials for social workers included best practices checklists, location of VR centers, tools for incorporating VR into QAPI activities, and timely articles related to VR. Patient materials included understanding Social Security benefits, working while on dialysis and a guide to local Vocational Rehabilitation Offices. Specific materials are located at http://www.nwrenalnetwork.org/SW/VR/VocToolkit.pdf.

b. Other Rehabilitation Activities

Northwest Renal Network also completed additional Vocational Rehabilitation activities such as offering Network assistance with questions about employment and ESRD in new patient postcards, monthly patient bulletins and the Consumer Newsletter. As a result, NWRN received 31 contacts in 2012 from patients, providers, renal organizations, and other ESRD Networks for assistance with VR.

c. Effectiveness
The Network consistently provides assistance to facilities and individual patients with vocational rehabilitation, and received positive feedback from social workers regarding the 2012 VR Toolkit. Due to the facility surveys indicating a significant drop in VR outcomes, for 2013 the Network plans to provide further outreach and training not only regarding VR tools and resources, but on accurate 2744 data submission.

2. Self-Care

Northwest Renal Network facilities continued to offer patients a full range of treatment options including in-center hemodialysis and peritoneal dialysis, home hemodialysis including nocturnal, home peritoneal dialysis and renal transplantation. Refer to Figure 8 in the ESRD Patient Population section of this report for modality comparison graphs.

Descriptive information on self-care modalities was provided to patients in response to individual requests, as part of the New ESRD Patient Orientation Packet mailed to all new dialysis patients, in the Consumer News patient newsletter, and in resource materials available on the Network’s website or in hard copy to patients.

Because of consumer and provider interest in self-care and home options, the Network continued in 2012 to distribute a significant amount of information regarding the Buttonhole Technique and self-cannulation by patients. This included distribution of 316 Buttonhole Technique flyers.

a. Effectiveness

The Network’s PAC reviewed patient related materials to ensure they were appropriate for patients and effective in conveying the proper information; this includes Newsletter articles on self-care. In addition, the Network evaluated our home dialysis rates annually and developed appropriate Network, state, or facility interventions. The volume of Buttonhole/Self-Cannulation material requested, over 300, was an indicator of our effectiveness in proving self-care information.

3. Patient Input into Network Activities

Northwest Renal Network recognizes the central role of patients in its mission to promote optimal dialysis and transplant care. Patients provide essential input into the activities of the Network in a variety of ways.

a. Service on Committees

The Network has patients serving on both its Board of Directors (BOD) and Medical Review Board (MRB). The patients participate fully in the various oversight and planning responsibilities of the committees, ensuring that the perspective of the patient remains central in the planning and decisions of the committees. Two patients serve on the MRB Complaint and Grievance Subcommittee, whose activities include quarterly review of complaint trends, Network interventions, formal patient grievances, and key cases.

In addition to the BOD and MRB, the members of the Patient Advisory Committee (PAC) provided input in a number of ways. Amongst other activities, PAC members reviewed, recommended, and authored newsletter articles and one national publication, presented at patient and provider meetings, reviewed the Network’s Quality Improvement plans, and participated in the Northwest Dialysis Emergency Preparedness Coalition.
b. Direct Patient Feedback

Network also seeks direct feedback from patients in order to evaluate the effectiveness and impact of particular activities.

A feedback form is attached to every mailing of requested consumer education materials. The collected feedback is utilized to update the annual Consumer Education Plan (CEP).

As part an IQI project to increase the number of beneficiary contacts, and to evaluate the effectiveness of new education/outreach initiatives, the Network began in October 2011 to solicit feedback on all calls received from beneficiaries. Additionally, postcards were mailed to all patients 6 months post-initiation of dialysis. Since the start of the postcard project (November 2011) the average monthly percentage of calls attributed to the postcards is 32%. There was a sharp falloff in the number of patient contacts for November and December 2012, which coincides with the de-commission of SIMS, and Network inability to extract the data needed for direct mail to incident patients. Therefore no cards were mailed to new patients in November and December 2012. This drop when cards were not mailed further demonstrates how effective the postcards are.

c. Effectiveness

The Network received positive direct patient input concerning the Consumer Newsletter, the NKF Patient Symposium, and the distribution of education materials. Network also received a positive response from others in the community. National patient organizations, other ESRD Networks, individual providers, and regional dialysis organizations requested permission to reproduce and disseminate Network developed patient materials, such as the Network’s monthly patient bulletin.

4. Consumer Education Plan

Northwest Renal Network’s Consumer Education Plan (CEP) guides and summarizes the various activities of the Network in regards to consumer education. Examples of the Network’s consumer educational activities include the following:

- New ESRD Patient Orientation Package (NEPOP)
- Network facility poster
- Network newsletter
- Focused dissemination of educational information
- eBulletins listserv
- Network website
- Patient educational meetings
- Direct consumer requests
- Monthly patient bulletins
- Postcards to new patients

The individual activities assist the Network in providing a comprehensive educational service and experience to consumers. The CEP summarizes these individual activities and details the Network’s plan to meet the educational needs of its consumer population.
a. New ESRD Patient Orientation Package

Each patient in the Network receives an introduction letter from the Network in the New ESRD Patient Orientation Package. The letter contains information on the Network’s grievance procedure, the Network’s patient toll-free number, a brief description of the various responsibilities of the Network, some of the available education resources, the State Survey Agencies in the Network region, and offers assistance to consumers. The letter serves to introduce patients to the Network’s ability to provide educational services and information.

b. Network Facility Poster

The Network provides each facility in its region a poster which describes some of the Network assistance available to consumers including how to request educational information and the role of the Network in handling complaints and grievances. The poster is revised as needed to address new CMS contract requirements. The poster is provided to each new facility in the Network region.

c. Network Newsletter

The Network newsletter, Consumer News, is a core component of the CEP. The Network’s newsletter is a 1-page (double-sided) educational document that is posted to this Network’s website as a sustainable educational resource at http://www.nwrenalnetwork.org/P/NCN.htm. The Network distributes the newsletter to each facility with specific instructions to provide it to consumers. Two newsletters distributed in 2012 are summarized below.

**Network Newsletter Consumer News Vol. 6/Issue 1:**

“**Earthquakes, Wildfires and Floods! – Oh My!”**

This issue of the newsletter focused on important things for patients to consider and ask their providers to aid in their personal emergency preparedness planning. Resources were also provided. A flyer offering free educational materials from the Network’s resource library was attached.

**Network Newsletter Consumer News Vol. 6/Issue 2:**

“**Dialysis – You Have Options**”

The featured article discussed and described treatment options for ESRD patients. Additional included information on self-care, reasons to change from a catheter to a fistula, and advances in treatment.
d. Focused Dissemination of Educational Information

The Network included consumer educational materials and resources in communications with providers, presentations to providers, and in other Network activities. These resources were shared with the intent that providers will use the information in their educational and treatment activities with consumers. This method of distribution is considered to be cost effective. The monthly patient bulletins were a popular item in 2012.

e. eBulletins

The Network maintains an email listserv as described previously in Section 3.B eBulletins and Fax Blasts. Information disseminated includes Network activities, consumer resources, educational materials and other issues of interest to ESRD patients. See http://www.nwrenalnetwork.org/news_bulletins.htm for a list of eBulletins.

f. Network Website

The Network utilizes its website, http://www.nwrenalnetwork.org/, to primarily support and enhance its other educational activities. Electronic copies of educational materials and resources will often be posted on the website in conjunction to being disseminated to consumers and providers. The website is Section 508 compliant, maximizing accessibility. The consumer section of the website contains a variety of information including a long list of education materials available to consumers, electronic versions of the Network’s newsletter, the Network’s complaint and grievance procedures, and information on emergency preparedness and facility closures.

g. Patient Educational Meetings

The large geographical region of Network 16, relatively low patient census, and its diverse patient population limits the ability to the Network to conduct direct patient educational meetings. The Network looks for opportunities to partner with other renal organizations to provide direct patient education and attempts to conduct patient educational activities in conjunction with other Network activities such as Quality Improvement projects and Network provider presentations.

During 2012, the Network co-sponsored two consumer-focused educational meetings. The first meeting was the National Kidney Foundation’s (NKF) Spring Patient Educational Symposium in Portland, Oregon, on March 18, 2012. The second meeting was the NKF Fall Patient Educational Symposium in Portland, Oregon, on September 16, 2012. Additionally, the Network Participated in Transplant Choices Conference for patients in Tacoma, Washington, on October 5, 2012.

h. Direct Consumer Requests

The Network responds to individual consumer requests for educational materials and resources. In order to be prepared to respond to consumer requests, the Network maintains a list of materials by topic area. The Network attempts to maintain at least three resource materials (sources) for each topic area. The educational material list is updated on a yearly basis at a minimum. During 2012, the Network distributed 650 individual pieces of educational materials to consumers from its official educational material list.
The current list contains over 100 educational resource titles covering the following topic areas:

- Adequacy
- Advance Directives
- Anemia
- Bone Health
- Caregivers
- Chronic Kidney Disease
- Coping & Depression
- Diabetes & High Blood Pressure
- Dialysis Facility Compare
- Emergency Preparedness
- Exercise
- Financial Concerns
- Hemodialysis
- Home Hemodialysis (ex. Daily, Nocturnal)
- Immunizations
- Medicare
- Medicare Part D
- Northwest Renal Network
- Nutrition
- Patient Rights
- Pediatric Patients
- Peritoneal Dialysis
- Rehabilitation
- Self-care
- Special Populations
- Transplant & Organ Donation
- Travel
- Vascular Access

When requesting educational materials, consumers have the option of accessing the information on the Network website, being directed to another website containing the information, or may receive the information in hard copy by mail. The Consumer Request Forms are provided in both English and Spanish.

i. Effectiveness

The PAC reviewed patient-focused materials, including the Consumer Newsletter, to ensure that the Network was conveying the proper information to patients. The Network continually tracked the number of visits to our website and provided feedback forms with our educational materials and Newsletter. These steps allowed the Network to determine the areas of greatest interest, as well as the effectiveness of the materials. The Network analyzed the responses and made appropriate changes as needed. As an example, PAC reviewed and recommended changes to a Consumer Newsletter article on Treatment Options.

C. GOAL - Improve patient perception of care and experience of care and resolve patient’s complaints and grievances.

1. Beneficiary Communication

Northwest Renal Network maintains a toll-free telephone number to ensure patient access to the Network. In 2012, the Network conducted a number of beneficiary activities in an effort to enhance its patient services and increase beneficiary contacts. The Network’s communication outreach included co-sponsored two patient meetings, published two patient newsletters and twelve posters/flyers, and mailed follow-up post cards for patients six months into dialysis. In addition, the network updated the Network’s educational materials.
a. Effectiveness

The Network provided its patient focused communications to the PAC prior to publication. This allowed the PAC to review the information, provide their input, and ensured that the material was both understandable to the target audience and conveyed the proper information. In addition, the patient symposia were organized and run by patients with minimal staff assistance.

2. Patient and Facility Concerns

The Network responded to concerns, complaints, and grievances from members of the renal community including beneficiaries, beneficiaries’ family, facility staff, state agencies, and many others. Dialysis and transplant facility staff also consults with the Network on a regular basis on challenging patient situations. The consultation between the Network staff and providers in the community is a critical proactive activity aimed at reducing complaints and grievances. Figure 36 earlier in this report summarizes the Network’s facility contacts by category.

Figure 43 below summarizes two categories of contacts received by the Network: (1) complaint or grievance contacts from beneficiaries and representatives; and, (2) general inquiry contacts from beneficiaries and representatives.

![Figure 43](image_url)

The Network began new patient outreach activities late in the 3rd quarter of 2011, in an effort to increase patient engagement with the Network (contacts, E Bulletin registration,
visits to the website). Contacts from beneficiaries in the 4th quarter of 2011 rose, and that rise was sustained throughout 2012. Beneficiaries who called the Network were queried regarding the reason for their contact. Since the start of the postcard project in November 2011 (mailing to incident patients 6 months post-initiation of dialysis), the average monthly percentage of calls attributed to the postcards is 32%.

**Figure 44** below summarizes the beneficiary contacts into categories. Requests for educational materials are consistently the most common category of patient contacts.

![Figure 44: # of Beneficiary/Representative Contacts by Category by Quarter July 2011 - December 2012](image)

**a. Effectiveness**

The Network tracked both the number of calls and the area of concern. This allowed the Network to track the level of communications and the areas of concern compared to specific Network outreach activities. The Network determined the effectiveness of specific interventions. If interventions are deemed to be ineffective, they were reworked with the assistance of the MRB and the results are tracked again.

3. **Proactive Activities Aimed at Reducing Patient and Provider Conflict**

**Dialysis Patient-Provider Conflict (DPC)**

In October 2003, forty-six concerned ESRD stakeholders from twenty-seven different organizations met in St. Louis, Missouri, for a National Consensus Conference titled *Dialysis Patient-Provider Conflict: Designing a Collaborative Action Plan with the ESRD Stakeholders*. At this conference, which was sponsored by the Network Coordinating Center and funded with a generous grant from ESRD Network 12, the reasons for conflict in the dialysis clinic and solutions for decreasing conflict were discussed. As the
result of this Consensus Conference, the Decreasing Dialysis Patient-Provider Conflict (DPC) project was initiated under the guidance of co-chairs Glenda Harbert, RN, CNN, CPHQ, and Richard Goldman, MD, with funding provided by the Centers for Medicare & Medicaid Services (CMS).

The project workgroup created the DPC (Decreasing Dialysis Patient-Provider Conflict) toolkit. The toolkit contains training materials and resources to be used by dialysis units to prevent, reduce and resolve conflict between patients and treatment providers. Since its publication, Network 16 has promoted the use of the DPC Toolkit via individual facility contacts; community presentations; website; eBulletins; new facility packets; and by distributing DPC order forms at provider events. DPC is utilized as a resource when providing technical assistance to facility staff, whether in response to individual patient complaints, or in addressing Network identified facility trends. DPC is referenced as a resource in several Network developed materials. Copies of the DPC Toolkits are distributed to callers and facilities, and the Network website provides a link to the current version at http://www.esrdncc.org/index/decreasing-dpc.

**Patient Complaint Trending and Education**
Quarterly trending of consumer complaints and identification of the most common categories of concern revealed that the majority of complaints received were safety related, followed closely by concerns about staff professionalism. In partnership with Network 18 and NKF, the NWRN conducted a monthly WebEx series (June-December 2012), featuring common reported patient concerns, as well as topics requested by facilities in a Network conducted scan. WebEx schedule:

- June – Safety in the Dialysis Unit
- July – Bloodstream Infection Prevention and NHSN
- August – Depression and the Dialysis Patient
- September – Interrelation of Professional Communication and Optimal Patient Outcomes
- October – Emergency Preparedness
- November – Helping Patients to Follow their Treatment Plans
- December – End of Life Issues in the ESRD Setting

Evaluations were completed by participants in each of the programs. The majority of facilities (an average of 93%) of attendees indicated the presenter provided new information and that they would make changes in their practice as a result.

These WebEx programs are still available on the Network’s website, and facilities with complaints related to one or more of the topics are requested to incorporate this education into their QIA plans.

**Involuntary Discharge – Prevention and Education**
The Network assists providers in managing challenging patient situations. Most challenging situations can be successfully managed through effective assessment, care planning, interventions, and collaboration between providers and patients. Providers are encouraged to reference the DPC materials provided by the Network and to consult with the Network regarding challenging situations.

The Conditions for Coverage (CfC) for End-stage Renal Disease Facilities require facilities to notify both the Network and the State Survey Agency of involuntary discharges and transfers. The Centers for Medicare and Medicaid Services (CMS) expects the Network and State Survey Agencies to work collaboratively to ensure facilities follow the requirements of the CfC and to protect the rights of Medicare beneficiaries.
The Network’s document “Notifying the Network of Involuntary Discharges and Involuntary Transfers” is posted on the Network website and shared routinely as a key reference when dealing with possible IVD cases. An eBulletin goes out to providers every 6 months to remind them that the document was created to assist dialysis facilities in complying with the requirements of the CfC and Interpretive Guidance. It is also intended to assist facilities in understanding what the Network will be requesting in order for it to fulfill Network goals and the terms of its current CMS contract. This information is also included in new facility packet.

During 2012, the Network worked collaboratively with the State Survey Agencies by providing lists of Network received IVD cases to each individual state agency. This ensures that facilities are following the requirements of the CfC and protects the rights of Medicare beneficiaries. Additionally, IVD trends are reviewed on a quarterly basis by the MRB Complaint & Grievance Subcommittee for recommended follow-up. This includes IVD demographics, IVD by facility, IVD by provider group, reasons for IVD, and patient’s current status.

The Patient Services Department and Data Department utilize CMS data systems to track and trend involuntary discharges. Network 16 will continue to participate fully in CMS and ESRD Networks’ collaborative efforts to address involuntary discharge trends and proactive measures to avert these events.

Other Activities
In addition to the activities above, the Network conducted many additional activities in 2012 designed to help staff and patients navigate kidney disease. A small sample of activities included providing the Network’s Consumer Newsletter to each facility and participating in care conferences in an effort to mediate patient-provider conflicts. Many of the monthly patient bulletins focused on patient/provider conflict. For instance:

- July 2012 – We are Here for You reviewed the Network’s role in mediating patient concerns
- October 2012 – Featured Patient Rights Related to Involuntary Discharge

NWRN staff presented to providers in 2012 regarding difficult patient situations:

- CNSW Northwest Chapter (April 26, 2012) – CAHPS In-Center Hemodialysis Survey Update
- CNSW Northwest Chapter Fall Symposium (October 26, 2012) – Case Studies: Successful Strategies for Working with Challenging Dialysis Patients
- ANNA Big Sky Renal Conference (November 1, 2012) – Conflict: Be Cool
- ANNA Big Sky Renal Conference (November 2, 2012) – Social Networking and Boundaries: Where to Draw the Line?
- CNSW Oregon (November 12, 2012) – Involuntary Discharge and the Prevalence of Chemical Abuse and Mental Health Issues

Additionally, in response to identified trends, NWRN PSD and QID conducted site visits to 3 facilities in November 2012 – one due to excessive IVDs and the other two due to excessive complaints. NWRN reviewed with facility leadership their QAPI processes related to patient concerns; conducted patient and staff interviews; and provided feedback letters with recommendations to each facility following the site visits.
a. Effectiveness

The Network tracked the change in complaints and IVD reported throughout the Network. This allowed the Network to assess the effectiveness before and after our interventions such as the DPC Toolkit and the various webinars. In addition, because event-specific evaluations were conducted, the Network determined the effectiveness of the speaker and information and made changes as needed for future sessions.

D. GOAL - Improve collaboration with providers to ensure achievement of the goals through the most efficient and effective means possible, with recognition of the differences among providers (e.g., independent, hospital-based, member of a group, affiliate of an organization, etc.) and the associated possibilities/capabilities.

1. Community Outreach

Northwest Renal Network is part of a larger renal community that includes patients, providers, federal and state government agencies, professional associations, educational institutions, non-profit and for-profit organizations, and the general public. In addition to activities conducted independently, the Network also participates in collaborative activities with other members of the renal community and organizations that promote improved health outcomes.

In 2012, Network staff, Board, and committee members continued to be active participants in the renal community through affiliation and membership in national, state and local organizations including: Renal Physicians Association (RPA), National Renal Administrators’ Association (NRAA), American Nephrology Nurses’ Association (ANNA), National Association of Nephrology Technicians/Technologists (NANT), Association of Vascular Access (AVA), National Kidney Foundation (NKF) Professional Clinician Councils, and the American Dietetic Association (ADA). Network staff served on CNSW’s Executive Committee and as Renal Financial Renal Network’s Program Chair.

The Network participated in local and national community projects such as the Fistula First Breakthrough Initiative (described earlier in this report); emergency preparedness and response activities including the national Kidney Community Emergency Response Coalition (KCER); Northwest Dialysis Emergency Preparedness Coalition (Network 16); presented at national meetings sponsored by National Kidney Foundation (NKF) Professional Clinician Councils, and the American Nephrology Nurses’ Association (ANNA); and collaborations with Quality Improvement Organizations, and State Survey Agencies.

a. Effectiveness

The Network actively reached out to affiliated organizations, coalitions and others for participation in activities and events. The Network evaluated the effectiveness of our community outreach and collaboration based on the sheer number of collaborative activities, number of requests for presentations, and the leadership roles assumed by Network staff and affiliated individuals compared to previous years.

2. Emergency Preparedness and Response
a. Kidney Community Emergency Response (KCER) Coalition Participation

Northwest Renal Network, through direct staff involvement, was active in working collectively with the facilities to plan for potential emergencies and mitigate existing emergencies. Staff continues to participate in KCER summits, conference calls, and work groups. KCER workgroups with Network representation included the Federal Response, Pandemic and Infectious Disease Response, Staff and Volunteer Response, Facility and Patient Tracking, Communications, Transportation Task Force, and Strategic Planning. In 2012 QI/CEC served as the team leader for the KCER Patient Assistance Response team.

b. Additional Emergency Preparedness and Response Activities

Northwest Renal Network has continued its reciprocative alliance with Network 18 for emergency preparedness. The Network annually tests the process of serving as the other’s back-up for communications.

As events occur throughout the year among Network facilities, direct contact is made by the Network to the involved facilities to check their status and need for possible assistance. The Network has also conducted two drills with all or a portion of our facilities. Occasionally these drills have pointed out the need for process change on both sides. This was evidenced by the Great California Shakeout where only 32% of facilities participated. Following a root cause analysis, the Network provided additional outreach and reinforcement to the facilities. As a result, 86% facilities participated in a follow-up drill.

The PSD and QI/CEC have attended and/or addressed over twelve organizations involved in patient or emergency care and response. These meetings have served to bring to the forefront the necessary inclusion and presence of the vulnerable dialysis patient and community in the emergency planning for the future.

c. Effectiveness

The Network gauged the effectiveness of our KCER and emergency response activities by the level of participation in Network drills and the response during emergencies. When there is a lack of communication during a drill, the Network worked with the facilities to determine the root cause and react accordingly. In addition, in the case of an emergency such as a snow closure, the Network observed how both its response and that of the facilities compares to the protocol. If there is a divergence, the Network investigates the issues and works with internal and external stakeholders to rectify the situation. This was evidenced when the Network realized there was a lack of clarity in its internal emergency plan. The plan was evaluated, updated, and staff was retrained.


The Northwest Dialysis Emergency Preparedness Coalition was established in 2009. It is a multi-state collaborative project that is aimed at improving ESRD Facility/ Patient and Emergency Responder Preparedness and Response Processes in Emergency Situations. In 2012, the Coalition continued to meet via conference call on a monthly basis.
In October 2011 The Northwest Dialysis Emergency Preparedness Coalition Toolkit for Dialysis Facilities was completed and delivered as a CD to all Network 16 facilities. The toolkit contained 68 entries ranging from facility assessment tools to call tree templates to drills to do with patients, to emergency diets and patient ID sources. This toolkit was made to assist the facilities in creating or bolstering their facility emergency plan. A follow-up asset survey was conducted in 2012 to evaluate the effectiveness of the Network’s Northwest Dialysis Emergency Preparedness Coalition activities. As new facilities come online they are sent in their new facility packet, a copy of the 2012 asset survey and outcomes and a copy of the CD Toolkit.

**Collaboration with local county emergency managers:**
The consistent association with the local emergency management organizations has helped bring about the inclusion of the dialysis patient into the emergency plans as part of the high risk populations that must be considered during a disaster. There is an increased awareness of the need of the dialysis patient to obtain treatment. Consideration is also given to the possibility of assistance in obtaining potable water and electricity for the facilities. During 2012, QI/CEC continued attending the monthly ESF-6 meetings for King County, Washington and the monthly Pierce County High Risk Populations Disaster Planning Group in Tacoma.

In addition in June 2012 the Network participated in the Evergreen Quake exercise with Washington State Dept. of Health, Pierce County Dept. of Health and specifically with the dialysis facilities in Pierce County. The exercise was to test responses to a massive earthquake in the Puget Sound area. Based on that premise, the facilities were individually called by the Network and given a separate scenario to react to, i.e. complete power outage, no water service, ingress or egress bridges out, etc. Each facility was to communicate how they “handled the situation” on paper and faxed back their solution within a specific time limit to the Network. There were varying degrees of reactions/participation to the conditions, but it was noted that the facilities stated this method of drill was more effective to the response thought process. Due to communication issues with both, the state and county officials, our smaller drill still produced valuable learning opportunities.

**a. Effectiveness**

The Network completed an asset survey early in the infancy of the Emergency Preparedness Coalition, in 2010. This was to determine a baseline for the project. In early 2012, the Network completed a second follow-up survey to determine the effectiveness of the Coalition’s activities such as the Toolkit, drills and WebExes. The results of the survey indicated there had been changes that correlated with recommendations, i.e. increasing the amount of dialysis supplies kept for emergencies and an increase in the frequency and type of patient drills held at facilities.

**4. Collaboration with Quality Improvement Organizations (QIOs)**

ESRD Networks may collaborate with QIOs in some areas where their CMS scopes of work overlap, as well as partnering on resources and knowledge to improve the efficiencies of both organizations. In 2011, Network activities with QIOs included:

Montana CKD Sub-National Collaboration with Northwest Renal Network
A limited number of QIOs were awarded a special project in the area of Chronic Kidney Disease in the latter part of 2008. The Mountain Pacific Quality Health Foundation (MT QIO) was the only one in this Network region to receive this project award. The Network
collaborated with the QIO related to their efforts in improving vascular access placement for patients. This collaboration included a data sharing agreement, and during the first half of 2011 the Network successfully uploaded Fistula First and Medical Evidence Report data to the MT QIO seven times.

5. State Survey Agencies

During 2012, the Network maintained the established confidential dialysis facility feedback form started in 2009. This consisted of a confidential dialysis facility feedback form that could be initiated upon request of the SSA for any facility that was approaching a state survey. This form would provide information regarding any complaints/grievances, QI action plans submitted, vascular access rates, and involuntary discharges. It also contained the facility standing with regard to quality improvement initiatives. During 2012, there were informational reports exchanged on 24 facilities. ESRD Networks also collaborate with State Survey Agencies (SSA), proactively or in response to specific concerns in the Network area. Additionally in June of 2012 the Network began sending out a letter to each facility following the receipt of their survey. The letter reminded the facility administrator that the Network was available to assist them in any way to eliminate the cited issues and included a listing of examples of technical assistance available. The Network activities with State Survey Agencies in 2012 included providing technical assistance to four facilities facing slow track decertifications, requests from state surveyors on facility participation and clinical outcomes for 18 facilities, and providing technical assistance to 3 facilities at the request of state surveyors.

In 2012 the Network began sending a follow-up letter to the facilities that were surveyed, reminding the facilities the Network was available with technical assistance to the items cited on their surveys. A flyer was also sent listing all of the possible subjects the Network could directly assist the facilities with.

a. Effectiveness

One way the Network determined the effectiveness in the cooperation with the SSA was the attendance at quarterly calls. Other areas included an increase in requests for information prior to surveys and collaboration on complaints and grievances. If the Network determined a lack of participation or communication with a specific state, it worked directly with the SSA to identify the root cause and rectify the situation. This included changing dates/times of calls when attendance was low.

6. Interaction with Other Organizations Serving the ESRD Community

ESRD Networks collaborate with a variety of other organizations to provide education and technical assistance on ESRD patients and facilities. This collaboration allows for the spread of information and best practices throughout the Network and the ESRD Community as a whole. Community partners included other ESRD Networks, State/Local Departments of health, emergency preparedness groups at a local and state level and patient organizations. The Network interacted with regional QIO’s in Montana, Idaho, Oregon and Washington. In addition the Network worked with professional organizations, including CNSW, ANNA, NANT, BONENT, and NRAA.

a. Effectiveness

As mentioned previously, the Network determined the effectiveness of our interaction with other organizations based on the number of interactions and the requests for
participation or presentations compared to previous years. If determined that the Network was not achieving the proper number of high quality interactions, the Network reviewed its outreach with the help of the PAC, MRB, and BOD, and adjustments are made. As an example, when it was determined that the Network was not properly communicating with Alaska emergency preparedness officials, the Network identified the proper contacts and hosted a conference call.

E. GOAL - Improve the collection, reliability, timeliness, and use of data to measure processes of care and outcomes; maintain Patient Registry; and to support the ESRD Network Program.

1. Data Forms Processing

Network staff processed 1587 Medical Evidence Reports (CMS 2728), 925 Death Notifications (CMS 2746), and 182 Annual Facility Surveys (CMS 2744) in 2012 using the SIMS system. An additional 1580 CMS 2728 forms and 897 CMS 2746 forms were processed in CROWNWeb by dialysis facility and Network staff. Network staff also provided CMS-approved information in response to 82 inquiries from Medicare Advantage organizations regarding the status of CMS 2728s filed with the Network and transplant status of ESRD Medicare beneficiaries enrolled in Medicare Advantage organizations.

2. Forms/Instructions

As in previous years, in 2012 Network staff time dedicated a considerable amount of time to facility re-education due to large turnover of Data Coordinators at facilities. Data templates, guides and instructions were offered to new Data Coordinators when they started, along with being provided to facilities in mailings and upon request by individuals. The Network continued to refer facility staff to the data forms section for the Network website that includes frequently asked questions, links to the 2728 and 2746 forms and the Patient Activity Report, a CMS compliance section, and information about CROWNWeb. Network staff also continued to offer and provide technical assistance to facilities for the forms, including offering to arrange on-site or teleconference training. Using the CMS Compliance reports and a Network developed tool, the Network tracked individual form errors. Upon the national release of CROWNWeb, Network staff switched to technical support for data entry of forms into CROWNWeb by facilities. This included reinforcing training, reporting bugs to the QualityNet Help Desk, and providing form entry walkthroughs with individual facility staff members.

a. Effectiveness

The majority of 2012 was spent first in preparation for the transition to CROWNWeb and then supporting facilities after the June 2012 national release. Due to the time needed to complete the transition, network staff focused on being on call for facilities needing assistance. Network staff worked to collect as many NPARs and missing forms in order to have a complete database to be extracted for CROWNWeb. Network staff succeeding in collecting and inputting all required NPARs into SIMS and had fewer than 10 overdue 2728 and 2746 forms prior to the shutdown of SIMS on 05/18/2012. Staff also focused on ensuring each facility had the appropriate CROWNWeb users in place before the national release. To prepare for the onboarding of all facilities, data staff surveyed all Network 16 CROWNWeb Phase 3 testers to provide input on their experience with the QIMS registration process. Input received through this anonymous survey included facility comments about the concise instructions and follow up provided
by the Network for the QIMS registration process, the willingness to provide help, and the ability to assist a facility with the problem or direct the facility to the correct contact. The results of the survey were compiled and forwarded to CMS, the QualityNet Help Desk, and used by the Network to better assist users with QIMS registration.

3. Compliance Reports

CMS required facilities to meet a 90% annual compliance rate for accuracy and timeliness in form submission.

Compliance

The final compliance mailing was sent to facility administrators in 2012. The mailing contained the facility’s annual compliance rate for 2011, along with a chart trending their facility’s compliance for five years. The Network as a whole had an overall score above 90%. However, those individual facilities not meeting CMS data compliance standard were asked to evaluate or reevaluate their forms completion process and develop an Action Plan or work one on one with data staff to increase their compliance rates through an IQI project. The Network reviewed submitted Action Plans, and the facility was contacted if further clarification was needed, or if the Network assessed that the Action Plan needed revision.

A second mailing went to facility Data Coordinators. This mailing included a copy of the compliance trending chart, a detailed, patient level form specific error report, instructive information on common errors on the forms along with a referral to the Network Website for additional help on forms. Data Coordinators were also encouraged to contact the Network directly with any questions or to seek technical assistance. Facilities that did not meet the CMS compliance goal were notified that a plan for improvement had been requested from their Facility Administrator. The availability of data compliance reporting ended May 18, 2012, with the decommissioning of SIMS. There are no reports currently available in CROWNWeb that provide a compliance rate for facilities.

Other Compliance Projects

Based on the success of the prior IQI project to improve 2728 and 2746 timeliness compliance, the Network chose to offer a variation of the completed project as an alternative to the facility developed action plan done in previous quarters. The Network offered technical support in three categories - facilities needing assistance with accuracy, timeliness, and facilities needing assistance with both categories. 7 units signed up for the Network accuracy project, 10 facilities signed up for the timeliness project, and 20 facilities signed up for assistance with both. To assist with accuracy, data staff reviewed prior errors with facilities, worked with facilities to identify potential errors on current forms, and discussed each submitted form with the facility. To assist with timeliness, Network staff developed and distributed a timeline for form due dates (based on event date such as first chronic outpatient dialysis or date of death) and worked with facilities to develop reminders for upcoming due dates. This project continued until the decommissioning of SIMS.

For CROWNWeb, Network staff developed a system to monitor and follow up on missing forms using the reports available in CROWNWeb. However, due to problems with the functionality of the CROWNWeb report, the time needed to create the list of missing forms makes it extremely inefficient, now taking approximately 12 hours to complete.

a. Effectiveness
For the 37 facilities participating in the compliance project, all but 2 facilities improved their compliance measure from their 2011 ending compliance to the compliance rate as of the SIMS shutdown date of 05/18/2012. The average improvement in the area the unit focused on was 27.5% improvement in accuracy, 20.1% improvement in timeliness, and 13.5% average improvement for those working to improve in both categories.

![Network 16 - 2012 Compliance Project - Average Compliance Rate for Participating Facilities](image)

### 4. Annual Facility Survey

174 Annual Facility Surveys (CMS 2744) for the prior calendar year were sent to Network dialysis facilities in 2011 along with the Quarterly Ending Patient Population Reports and Patient Event Reports. 8 Annual Facility Surveys were sent to Network transplant centers, along with an Annual Transplant Report. All 182 surveys were returned. Network staff made follow-up calls for outstanding forms and data to ensure timely and accurate completion of the collection process. Updates and corrections were incorporated into the CMS SIMS database in preparation for the April/May submission deadlines. Data staff verified the aggregated CMS Annual Facility Information twice before finalization by CMS.

#### a. Effectiveness

The Network’s efforts were effective because 100% percent of Annual Facility Surveys were submitted before the deadline without errors.

### 5. Network Data Quality Improvement

In 2012, approximately one thousand one hundred thirty-eight (1138) calls took place between the data department and facilities regarding information management. There was an increase in technical assistance from the end of 2011 through March 2012 as Network staff began early preparation for the 2744 (Annual Facility Survey) in anticipation for the national release of CROWNWeb (Figure 46). Although there was a drop in the number of calls after the national release of CROWNWeb, the length of these calls increased significantly. In the month prior and after the national release of CROWNWeb, individual call lengths ranged from thirty minutes to five hours. These calls addressed facility questions and concerns about business rules in CROWNWeb, CROWNWeb module training, and data discrepancies between CROWNWeb and other
systems, and QIMS registration. Overall, QI and information management calls remain the most common reasons for provider contacts to the Network. There were also increased technical assistance QI and IM calls from facilities due to the release and need to re-register for the Dialysis Facility Report (DFR) web site access and assignment of Master Account Holders (MAH).

**FIGURE 46**

![Graph showing number of facility contacts for information management technical assistance by quarter from July 2011 to December 2012](image)

Data staff continued using an internal MS Access program to track outreach to facility Data Coordinators, and to log and graph these calls until the shutdown of SIMS in May of 2012. Staff trended the information to identify potential areas for outreach to facilities to assist in improving performance, as well as to determine opportunities to improve internal data forms management processes at the Network. Based on this data, staff created a data bulletin addressing the most common errors on Network and CMS forms and reports and sent this to each facility data coordinator. During June of 2012, the mechanism and manner in which calls were tracked changed as all Networks transitioned to using CROWNWeb on June 14th, 2012. In the latter half and beginning of 2013, data staff collaborated with several other Networks to develop a new tool to monitor Network CROWNWeb activity.

As part of the Network Internal Quality Improvement program (IQI), Data staff analyzed Information Management tasks to find potential areas for improvement. Effective data projects included:

- Forms compliance project with a focus on improving timeliness on CMS form 2728 and 2746 for underperforming facilities (see previous compliance section for further detail).

### 6. Data Reconciliation Activities

Data staff continued reconciliation of data elements in the SIMS and REMIS databases with emphasis on the validation of data in preparation for the conversion to CROWNWeb. Staff used various methods to validate and reconcile data. This included using Data Management Utilities such as the accretion and notification utility in SIMS,
along with processing REMIS alerts. Staff processed 1739 notifications prior to the decommissioning of SIMS. Ending Patient Population and Patient Event reports were sent to the Data Coordinators at all dialysis facilities on a quarterly basis, requesting data verification and corrections until the shutdown of SIMS. Returned corrections were entered in the SIMS database prior to the data pull used to populate CROWNWeb upon national release. Data staff ran CROWNWeb personnel reports for Phase 3 users and added appropriate data to SIMS prior to the conversion. In addition, per CMS request, data staff researched and responded to potential areas of cleanup needed in the SIMS system as identified by the CMS Data Discrepancy contractor.

Staff worked with transplant facilities to ensure timely data reporting to UNOS and to reconcile UNOS, REMIS and SIMS data. Network staff continued to validate and correct information in the SIMS database in coordination with other Networks, to ensure appropriate assignment of individual patients and events.

Network staff continued to process roster updates as submitted by facilities throughout the year to update Network facility information. A blank roster update form for facilities to submit these updates is posted to the NWRN website. Facility profile information was updated for the Dialysis Facility Compare website. With the advent of CROWNWeb, the responsibility of reporting changes transferred to facilities with a few exceptions such as entering new facility information or updating Medicare certified services. Network staff continue to remind and encourage facilities to enter any changes in personnel and Non Medicare certified services in CROWNWeb.

Data staff continued to be successful in identifying and reconciling data received by facilities prior to submission to CMS through the SIMS system, shown by very few records identified by the data management utilities and the SIMS Data Cleanup toolkit databases used to identify data discrepancies.

a. Effectiveness

Due to the success of yearlong data reconciliation activities, staff was able to complete the annual facility survey 02/29/2012, over a month in advance of the first deliverable date.

7. Collaboration

Data Staff collaborated with the Social Security Administration and CMS on resolving beneficiary problems related to validating their ESRD status. Staff provided patient specific information to the CMS ESRD Information Systems Branch, Office of Clinical Standards and Quality, CMS Region 10 and Region 8, individual HMO's, fiscal intermediaries, and Social Security Offices, in accordance with the according to the guidelines of the Network’s CMS contract.

8. Supporting Deployment and Maintenance of CMS Software, CROWNWeb

In 2012, the development of the CMS Web-based system CROWNWeb (Consolidated Renal Operations in a Web Enabled Network) continued to move forward.

CROWNWeb Participation:
In support of moving to the Web-based system, Network staff participated in a variety of activities. This year, data staff continued to provide technical support to its facilities participating in Phase 3 of CROWNWeb along with the CROWNWeb national release.
Phase 3 CROWNWeb:
Phase 3 was scheduled to start in 2011. However, due to technical problems with the new CROWNWeb registration system (QIMS) from its inception in September 2011 lasting through December 2011, on 12/20/11, CMS rescheduled Phase 3 for January 17th, 2012. QIMS technical and operational issues prevented many Phase 3 users from accessing CROWNWeb. Much of Network support during this time involved assisting users with getting registered for CROWNWeb using QIMS. Network staff focused on creating and distributing QIMS training materials, notifying users of upcoming CROWNWeb national Web-ex meetings, and providing notices from CMS about Phase 3 extensions.

QIMS (QualityNet Identity Management System) Registration:
During 2012, Network staff also spent numerous hours researching the QIMS process online and through conversations with the QualityNet Help Desk to determine security training requirements, QIMS application mailing requirements, user role and scope restrictions, technical issue workarounds and general process flow. Detailed instructions for the registration were created and distributed to facilities and shared with other Networks. These instructions were revised as new information was received. Data staff also provided phone support to users needing assistance with registration or experiencing technical difficulties. These calls range from 2 – 30 minutes in length, not including time spent researching answers to questions. A QIMS survey was created and distributed to Phase 3 users to gather information on the facility’s experience with the QIMS registration process. The results were compiled and sent to CMS, CRAFT, and the QualityNet Help Desk, along with suggested solutions.

Batch Testing and Support:
In support of batch submission, data staff reviewed weekly batch facility data uploads and admit/discharge reports, correcting and reporting errors on the monthly near match reports to the LDO and working with the LDO batch submitters and the LDO Single User Interface (SUI) participants to identify and attempt to resolve issues with the batch submission. Staff continued to investigate missing LDO patient and clinical data, Data staff worked with individual users to assist in using the single user interface (SUI) to add data not coming from batch. Staff sent communications to CMS, CRAFT, and the batch organizations regarding batch data discrepancies and issues discovered by facilities and Network staff.

Data staff also researched the new NRAA Health Information Exchange process. Staff responded to inquiries regarding the data process and hosted a meeting between an NRAA HIE representative and Networks to receive updates about the HIE process and discuss Network roles. Staff also provided direction back to HIE facilities regarding QIMS enrollment.

Upon the national release of CROWNWeb, Network staff continued to work with the batch submitters both to follow up on data issues and also to discuss communications from Networks and the large dialysis organizations, to ensure information distributed by both did not conflict with each other.

Communication
Network staff distributed numerous mass-communications to facilities about CROWNWeb through E-Bulletins, E-mail announcements and Newsletters to the community throughout the year. This included instructions and announcements about the CROWNWeb national release date.
Data staff notified users about all upcoming WebEx sessions, meetings and upcoming trainings for CROWNWeb and distributed Project CROWNWeb and QIMS registration links. Summaries of meetings were provided upon request for those users unable to attend. Staff also created and distributed documents explaining QIMS user roles and CROWNWeb user roles.

Data staff also continued to respond to a high volume of individual inquiries, questions, and need for technical assistance from facilities about CROWNWeb and QIMS through phone and e-mail.

**Other CROWNWeb Activities:**
Data staff provided support to the OCT Led In-person CROWNWeb training in Bellevue, WA June 12-15th.

Network staff responded to requests from CMS contractors for information needed to assist in the transition to CROWNWeb. This included providing information needed to complete delegation of authority (DOA) forms, researching data transformation issues, verifying facility mappings and providing information on instructions provided to facilities about data submission.

In addition, data staff continued to evaluate and comment on CROWNWeb Reports. Collaborating with all Network Data Managers, Quality Improvement Directors and Patient Service Coordinators, Network staff compiled a gap analysis report highlighting areas of CROWNWeb lacking the appropriate resources to complete contractual work. This was submitted to CMS through the Forum of ESRD Networks for review.

**a. Effectiveness**

The recruitment efforts for CROWNWeb Phase 3 by the Network were successful, as the Network exceeded the CMS goal of having twenty participating facilities for Phase 3, with twenty-six facilities volunteering for this Phase.

Although data staff continued to receive verbal appreciation about the instructions created and distributed by the Network, along with the technical assistance provided by data staff through phone and e-mail, data staff did not focus on tracking the effectiveness during 2012, as time did not permit additional resources to be dedicated to this task. However, the gap analysis report compiled by the Networks is currently being used in 2013 for a data task group comprised of CMS, CMS contractors, and Network data representatives.

**Current CMS Systems**

As Networks progressed towards implementation of CROWNWeb, Network staff continued to support CMS’s current systems through their decommission in May of 2012. These systems included the Standard Information Management System (SIMS), and also the Vital Information System to Improve Outcomes in Nephrology (VISION).

**VISION**

In March 2012, the last validation of patient and physician signatures was completed. Because of the smaller number of VISION facilities, the Network’s process is to validate at least three forms from each facility. Validation percentage for the 2012 VISION signatures was 9%. All Network VISION facilities passed the signature validation.

**SIMS**
Data staff continued to support the SIMS system by performing the data reconciliation activities mentioned above.

**OTHER CMS Systems**

Data Staff continued processing REMIS Alerts for data reconciliation between the CMS REMIS system and the Network SIMS system, as well as reporting Medicare eligibility issues to CMS Central Office using the REMIS system. The Network continued monthly entry and confirmation of Fistula First Vascular Access monthly data through April 2012.

9. **Maintenance and Security of CMS Hardware & Software in QualityNet Environment**

Data staff continued to provide technical support to maintain the QualityNet Environment. The Network uses the CMS designated Remedy System to maintain an accurate inventory of hardware and software in the CMS QualityNet environment. In addition, the Network Security Point of Contact (SPOC) does recurring compliance check on all workstations to ensure all equipment and software in the Network QualityNet environment was approved per CMS requirements and matched the Remedy system. Data staff provides ongoing maintenance of the Network hardware, troubleshooting problems and working to resolve hardware failures and security threats noted by Symantec Antivirus Software. The SPOC responded in a timely manner to requests from BCSSI for Network action needed to ensure software and hardware updates and patch compliance are completed. The annual updating of the Network’s *QualityNet Business Continuity and Contingency Plan (BCCP)* was completed to ensure a plan was in place for the recovery of CMS Hardware and Software after a disaster.

Data staff also had an increase in demands involving security in the QualityNet Environment. The SPOC conducted QualityNet Security Policies Testing to ensure all NWRN staff had sufficient knowledge of the required QualityNet Security Policies. The SPOC also reviewed security guidelines and updates distributed throughout the year, conducted periodic security checks of workstation configurations, monitored current active users’ accounts along with access roles/privileges. Disabled/deleted user accounts were logged, along with any reported security incidents and security incident responses. SPOC distributed security alerts as directed by the CMS ISSO. SPOC also reported security incidents to the QualityNet Help Desk and CMS along with submitting supporting documentation about the incident and education provided to the facility.

**IV. SANCTION RECOMMENDATIONS**

Northwest Renal Network made no recommendations to CMS for sanctions against any Network facilities in 2012.

**V. RECOMMENDATIONS FOR ADDITIONAL FACILITIES**

Patients in Northwest Renal Network have access to a full range of services, including in-center hemodialysis, home hemodialysis and nocturnal hemodialysis, continuous ambulatory peritoneal dialysis, continuous cycling peritoneal dialysis, intermittent
peritoneal dialysis, and renal transplantation. The availability of these services varies by state and geographic region. In 2012, home dialysis modalities were utilized by 15.3% of Network patients, a half-point increase over 2011 (see Treatment Modality section earlier in this report). However, the proliferation of home dialysis modalities has not reached its potential. Home modality availability is particularly important in rural area due limited facility access. Subsequently, Idaho and Alaska lead the Network in the utilization of home modalities, though Idaho has recently seen a reduction in the utilization of home modalities. Washington State, once the national leader in home modalities, now has the lowest home modality rates in the Network.

Additional outreach to Network facilities, especially in Washington and Oregon, is needed to provide education and technical assistance on the benefits of home modalities. In addition, significant outreach to Network patients and care givers is needed to provide non-biased information on home modalities that could help patients make the decision that is best for them. The Network is increasing its outreach efforts in 2013 and is developing resources designed to distribute information on home modalities to both facilities and patients.

This Network continued to experience a slow growth rate (1.8%) in new facility openings and in the number of dialysis stations (1.6%) during 2012, relative to a 4.3% gain in the number of prevalent patients. The number of facilities grew faster than the number of stations because several facilities divided themselves – opening a new facility by moving stations from their existing facility, rather than adding stations. While this doesn’t increase the overall number of chairs, it does increase service, by bringing dialysis closer to the population it serves. In 2012, the Network continued to participate in the health planning process by providing data on the geographic distribution of patients by treatment modality, incidence and prevalence of ESRD and other information needed for certificate of need review for proposed new services or expansions of existing services. Demographic data is periodically updated on the Network’s website, for use by providers, health facilities planners and other interested parties.