

2009 ANNUAL REPORT



Serving ESRD patients in New Jersey, Puerto Rico and the U.S. Virgin Islands.

Contract Number: 500-03-NW03, June 30

Submitted to: Kathleen Egan, Project Officer, CMS/Division of Quality Improvement, Boston, MA Submitted by: Quality Insights Renal Network Three, 109 South Main Street, Suite 21, Cranbury, NJ

I. PREFACE

2009 marked a year of continued improvement in care provided for people with end stage renal disease in New Jersey, Puerto Rico and the U.S. Virgin Islands. This summary report details the myriad activities undertaken by our staff and partners over the past year. We hope you find it useful in charting progress and identifying other ways we can work together to bring about positive change.

On the topic of change, 2009 was a significant year for the Trans-Atlantic Renal Council, which joined the Quality Insights family of companies, becoming Quality Insights Renal Network Three. The transition from TARC to Quality Insights brought with it a new executive director in Chris Brown and a new opportunity for collaboration within the Quality Insights family of companies, which share the mission of "improving the health of the people we serve." What did not change is Network Three's commitment to service and partnership.

As President and CEO of Quality Insights, I strongly believe this new affiliation will benefit the projects and programs implemented on behalf of ESRD patients. Together, Quality Insights can share and identify best practices and lessons learned across health care settings. We can also share staff experiences, talent and resources—all with the intent of providing excellent service to our customers, partners, and ultimately, the health care consumers we serve.

We welcome your input, feedback and active involvement as we look forward to working with the ESRD community for years to come.

John C. Wiesendanger

CEO WVMI & Quality Insights

John Elle usulan



The mission of Quality Insights Renal

Network Three is to provide

the professional framework within which

the provision of quality care to

consumers of end-stage renal disease

services can be maximized.



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II. INTRODUCTION

A. Network Description

On July 1, 2009, the Trans-Atlantic Renal Council (TARC) announced plans to become a part of WVMI & Quality Insights, a family of non-profit companies dedicated to improving health locally, regionally and nationally. The new company is known as Quality Insights Renal Network Three (Network Three), which continues to serve patients with end stage renal disease (ESRD) in New Jersey, Puerto Rico and the US Virgin Islands.

Quality Insights Renal Network Three's quality improvement focus and its non-profit mission are natural complements to the WVMI & Quality Insights family, providing the opportunity to share experiences, personnel and resources to the benefit of all of our customers, and most importantly, to the patients who will see the results of our quality work.

As specified in the CMS Statement of Work (SOW), each Network is responsible for conducting activities in the following areas:

- Quality Improvement
- Community Information and Resources
- Administration
- Information Management

Network activities, which are framed by the national program goals of improving the quality of health care services and quality of life for ESRD beneficiaries, are tailored to meet local needs and include:

- Assuring the effective and efficient administration of benefits
- Improving quality of care for ESRD patients
- Collecting data to measure quality of care
- Providing assistance to ESRD patients and providers
- Evaluating and resolving patient complaints and grievances

In calendar year (CY) 2009, 4,974 patients began treatment for ESRD in Network Three, 11 fewer than in CY 2008. Of these new patients, 58.3% were male, 69% were white, 26.7% were African American. The primary cause of renal failure was attributed to diabetes (49.7%), whereas 27.6% was attributed to hypertension. By the end of CY 2009, 16,068 patients were receiving dialysis treatment for ESRD in Network Three, 664 patients (4.3%) more than CY 2008.

The ESRD population in the Network Three area is the 5th smallest in the country. However, the high urban concentrations and population densities, particularly in New Jersey and Puerto Rico, present challenges relative to ESRD education and preparedness.



New Jersey-General Description

New Jersey contains 8,215 square miles with 21 counties and 567 municipalities. Its highest elevation is 1,803 feet at High Point and its lowest is sea level at the Atlantic Ocean with an average elevation of 250 feet. New Jersey is geographically one of the smallest states in the nation (it ranks 46th) however, in 2007 it was estimated by the Census Bureau to be the eleventh most populous, with approximately 8.7 million residents. There are 1,171 inhabitants per square mile of land area - the most densely populated state in the nation¹ followed closely by Rhode Island. The population is expected to increase 24% by 2030.²

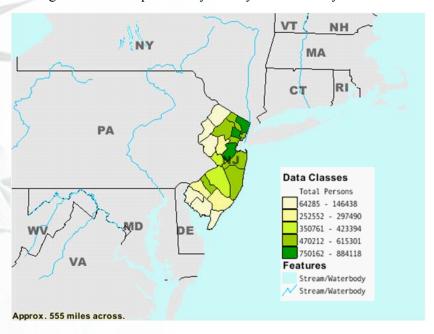


Figure 1. Total Population by County in New Jersey in CY 2000*

*Source: US Census Bureau, Census 2000 Summary File 1, Matrice P1

California and New Jersey are the only two states with a population that is 94.4% urban. The District of Columbia ranks higher at 100% urban.

While the percent (13.1%) of New Jersey residents aged 65 or more continues to be higher than the national average (12.6%), Figure 2 illustrates that six of New Jersey's 21 counties have over 13.6% of their populations aged >=65, two of which have over 20% >=65.

²State Resident Population - Projections: 2010 to 2030. (n.d.). In Statistical Abstract of the United States: 2009 (p. 19). U.S. Census Bureau.



¹State Population - Rank, Percent Change, and Population Density: 1980-2007. (n.d.). In Statistical Abstract of the United States: 2009 (p. 18). U.S. Census Bureau.

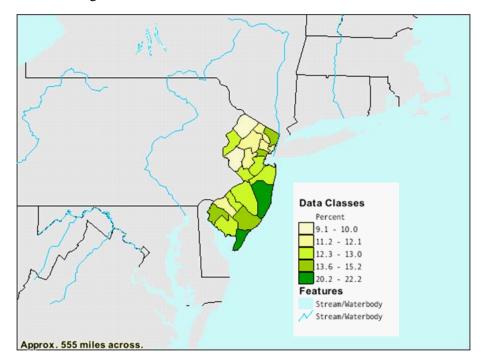


Figure 2. Percent of Persons 65 Years and Over in CY 2000*

*Source: US Census Bureau, Census 2000 Summary File 1, Matrice P1 and P30

The population in New Jersey is reported to be 76% white, 15% black, 8% Asian and 1% other. Most of the population growth in New Jersey during the last decade occurred in minority populations; Hispanics sustained the largest increase. Hispanics now constitute approximately 14.5% of the population within New Jersey, and Hispanics of Puerto Rican descent comprise more than 33% of all Hispanic residents. The largest increase of New Jersey's Hispanic residents occurred in Hudson and Passaic counties. Chronic kidney disease has a higher incidence among the black and Hispanic populations.

New Jersey's foreign-born population accounted for 17.5% of the population, surpassed only by California and New York. The foreign-born population and their associated lack of understanding materials written in English can present challenges relative to patient communication and education.

Another challenge to the health care system in New Jersey remains unauthorized immigrants. The state ranked eighth in the number of unauthorized immigrants, surpassed by California, Texas, New York, Illinois, Florida, Arizona, and Georgia. Mexico was identified as the country of origin for 69% of these persons.



ESRD Population - New Jersey

While the incident (newly diagnosed) ESRD population in New Jersey dropped slightly for the 2nd year in a row, the prevalent (chronic) patient population rose dramatically again in 2009.

In CY 2009, 3,461 people initiated treatment compared to the 3,491 in 2008, and 3,565 in 2007. Older people, in particular those over 65 years of age, continued to represent the largest and fastest growing age group of ESRD beneficiaries. Of the total new starts in 2009, 57.2% were 65 years or older, and 45.3% were 70 years or older. Twenty-two percent were \geq 80 years old compared to 20.7% in 2008. Of new patients, 57.8% were male and 42.2% were female; 63% were white and 32% were African American. The ESRD Network Program collects data on patients' racial identification to allow tracking of disparities in care and outcomes. Because race/ethnicity are inherently unstable, they should be interpreted with caution.

Among incident cases, the most frequently reported primary diagnoses were diabetes (43%) and hypertension (33%). The percentage of diabetes diagnoses remained the same as 2008, while the percentage of hypertension diagnoses rose from 29% in 2008. Collectively, these two diagnoses represented the largest proportion of new cases in 2009.

According to the 2009 Annual Facility Survey, 11,329 New Jersey residents are now receiving treatment in New Jersey dialysis providers, an increase of 447 (4.1%) patients from CY 2008. Of this number, 56.7% were male and 43.3% were female; 52.2% were white and 41.7% were African American. The primary causes of renal failure in this prevalent population continue to be diabetes (42%) and hypertension (30%).

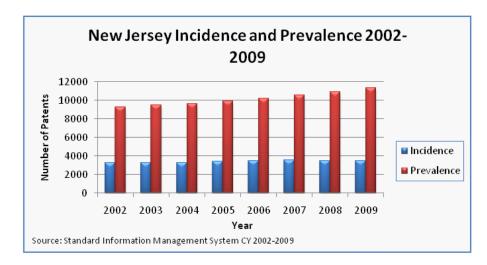


Figure 3. Annual Incident and Prevalent Patients in New Jersey - CY 2002-2009

Mortality Data - New Jersey

Death notification reports for New Jersey ESRD consumers were analyzed by sex, race, and cause of death. The primary cause of death reported in 2009 continued to be cardiac (46%), which again reflected national data. Infection was reported as primary cause in 16.5% of the 2,538 death records received. Of all deaths reported in 2009, 66% were white, 30% black; 57% were male, 43% female. As stated earlier, because race/ethnicity are inherently unstable, they should be interpreted with caution.

Transplantation - New Jersey

Five renal transplant centers serviced the New Jersey ESRD population, with referrals also being made to neighboring New York, Pennsylvania and Maryland. Recent years have seen an inflow for transplantation to New Jersey from neighboring state residents as well. Organ procurement activities were the responsibility of two federally approved agencies, the New Jersey Organ and Tissue Sharing Network (The Sharing Network) and the Gift of Life Donor Program.

In 2009, 465 transplants were performed in New Jersey at six federally certified ESRD renal transplant centers, a 1.3% increase from the 2008 total of 459 transplants.

The number of consumers on a waiting list in New Jersey as of December 2009 increased to 1,136, from 1,084 in 2008. Unless the donor pool is enlarged, transplantation will not be available to the majority of consumers on the list except, perhaps, after a lengthy waiting period. Alternatively, living donor transplantation may provide some candidates with more timely access to this modality.

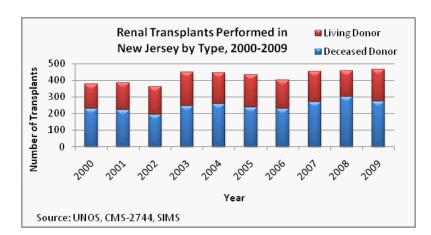


Figure 4. Renal Transplants performed in New Jersey by Type, 2000-2009

Puerto Rico - General Description

Similar to New Jersey, Puerto Rico is densely populated (1,124/sq. mi.) with land area covering nearly 3,425 square miles and an estimated 2008 population of 3.958 million. If Puerto Rico were a U.S. state, it would be the 2nd most densely populated (behind New Jersey). Between 1990 and 2000, the population increased 8%.



Figure 5. Total Population by Municipality in Puerto Rico in CY 2000*

*Source: US Census Bureau, Census 2000 Summary File 1, Matrice P1

The area has commonwealth status to the United States and is an unincorporated territory. Status relationship (i.e. statehood or independence) to the United States is under discussion with the US Congress and among island residents. The main islands of Puerto Rico, Culebra, Mona and Vieques, are all included in the area territory. All residents born in the area are United States citizens.

Tectonic plate locations near the island make it susceptible to earthquakes, landslides and tsunamis, with the last major earthquake estimated at 7.5 on the Richter scale in 1918. Droughts are one of the naturally occurring hazards to the local population, particularly on the southern part of the island.

One in every four Hispanic families lives at the federal poverty level, with average earnings well below the U.S. national average. Forty percent of all households rely on some form of public assistance. The average monthly benefit paid to retired workers is \$527. The average annual employee compensation reported by the most recent Bureau of the Census publication (2000) was \$23,910, compared to the US average of \$42,535.

⁴Source: GSA Center, US Geological Center, Island hydrology: Puerto Rico and the US Virgin Islands, at http://pr.water.usgs.gov/public/webb/webb/10



³Source: Statistical Abstract of the United States: 2009, US Census Bureau, US Dept of Commerce, 2008.

The percent of the population aged 65 years or older in Puerto Rico (12.8%) is also higher than the national average (12.6%) Figure 6 illustrates that 10 of Puerto Rico's municipalities have over 12.6% of their populations aged >=65.

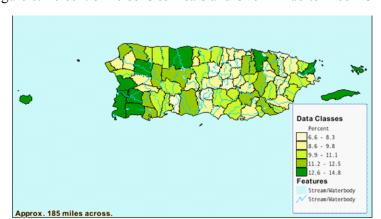


Figure 6. Percent of Persons 65 Years and Over in Puerto Rico - CY 2000*

*Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices P1, and P30.

ESRD Population – Puerto Rico

While the incident (newly diagnosed) ESRD population in Puerto Rico continues to fluctuate between 1,200 and 1,400 patients per year, the prevalent (chronic) patient population continues to rise dramatically.

In CY 2009, 1,375 people initiated treatment compared to the 1,337 in 2008, and 1,346 in 2007. Older people, in particular those over 65 years of age, continued to represent the largest and fastest growing age group of ESRD beneficiaries. Of the total new starts in 2009, 49% were 65 years or older, and 35% were 70 years or older. Eleven percent were ≥80 years old compared to 10% in 2008. Of new patients, 59.2% were male and 40.8% were female; 85% were white and 11.3% were African American.

Among incident cases, the most frequently reported primary diagnoses were diabetes (66.5%) and hypertension (14.5%). Collectively, these two diagnoses represented the overwhelming majority of new cases in 2009.

According to the 2009 Annual Facility Survey, 4,475 Puerto Rico residents are now receiving treatment in Puerto Rico dialysis providers, an increase of 229 (5.3%) patients from CY 2008. Of this number, 61% are male and 39% are female; 71% are white, 8.4% are African American, and 19.6% are multiracial. The primary causes of renal failure continue to be diabetes (60%) and hypertension (15%).



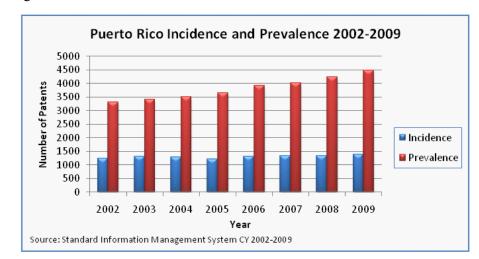


Figure 7. Annual Incident and Prevalent Patients in Puerto Rico - CY 2002-2009

Mortality Data - Puerto Rico

Death notification reports for Puerto Rico ESRD consumers were analyzed by sex, race, and cause of death. The primary cause of death reported in 2009 continued to be cardiac (36%). Infection is much more frequently a cause of death in Puerto Rico, and was reported as primary cause in 30.6% of the 1,072 death records received. Of all deaths reported in 2009, 71% were white, 6.2% black, 21.7% multiracial; 58% were male, 42% female. Because race and ethnicity data are inherently unstable, these percentages should be interpreted with caution.

Transplantation - Puerto Rico

One renal transplant center in Puerto Rico services the Puerto Rico ESRD population, with referrals also being made to Texas, Iowa, Tennessee, Massachusetts and New Jersey. Organ procurement activities were the responsibility of Life Link of Puerto Rico, an independent, non-profit organization which performs all aspects of human organ and tissue donation, procurement, and processing for transplantation and research.

In 2009, 86 transplants were performed in Puerto Rico, an 8.5% decrease from the 2008 total of 94 transplants.

The number of consumers on a waiting list in Puerto Rico as of December 2009 increased slightly from 423 patients in CY 2008 to 425 patients in CY 2009.



Figure 8. Renal Transplants Performed in Puerto Rico - CY 2000-2009

The U.S. Virgin Islands – General Description

The territory of the Virgin Islands consists of three islands - St. Thomas, St. Croix and St. John - and about 50 islets, most of which are uninhabited. These islands are located 60 miles southeast of Puerto Rico, between the Caribbean Sea and the Atlantic Ocean, in the Lesser Antilles chain of the West Indies.

The land area covers 134 square miles with an overall population estimated to be 110,000. There were 810 residents/sq. mi. in 2000. Population density fluctuates among the individual islands. St. Thomas has the highest density with 1,579 persons per sq. mi.; St. Croix has 583/sq. mi. and St. John only 118/sq. mi.

Population of the US Virgin Islands, 1990 and 2000

Island	1990	2000	2010 Estimated	% change
St. Croix	50,139	53,234	*	6.2
St. Thomas	48,166	51,181	*	6.3
St. John	3,504	4,197	*	19.8
All	101,809	108,612	110, 000	8.0

Source: US Census Bureau, Statistical Abstract 2004-2009.



^{*} Island specific estimates not available

Residents are comprised of people from the West Indies (45% native to Virgin Islands, 29% born elsewhere in West Indies), Puerto Rico (5%), U.S. mainland (13%), and other (8%). Racial composition in the Virgin Islands is estimated to be 80% black, 15% white and 5% other. English is the primary language, but Spanish and Creole are also commonly spoken.

Figure 9. Map of US Virgin Islands



ESRD Population – Virgin Islands

Both the incident (newly diagnosed) and prevalent (chronic) ESRD population in Virgin Islands continue to remain flat, a trend that has continued for 4 years.

In CY 2009, 42 people initiated treatment compared to 55 in 2008, and 48 in 2007. As with other areas, older people, in particular those over 65 years of age, continued to represent the largest and fastest growing age group of ESRD beneficiaries. Of the total new starts in Virgin Islands in 2009, 50% were 65 years or older, and 26% were 70 years or older. Of new patients, 66.7% were male and 33.3%

were female; 5% were white and 90.5% were African American.

Among incident cases, the most frequently reported primary diagnoses were diabetes (61.9%) and hypertension (23.8%). As is the case in the two other areas, collectively, these two diagnoses represented the overwhelming majority of new cases in 2009.

According to the 2009 Annual Facility Survey, 200 Virgin Islands residents are now receiving treatment in Virgin Islands dialysis providers, a decrease of 5 (2.5%) patients from CY 2008. Of this number, 62% are male and 38% are female; 5% are white, 91% are African American, and 3.5% are multiracial. The primary causes of renal failure continue to be diabetes (49%) and hypertension (32%).



Virgin Islands Incidence and Prevalence 2002-2009 250 Number of Patents 200 150 100 Incidence 50 ■ Prevalence 2006 2008 2003 2004 2005 2007 Year Source: Standard Information Management System CY 2002-2009

Figure 10. Annual Incident and Prevalent Patients in Virgin Islands - CY 2002-2009

Mortality Data – Virgin Islands

Death notification reports for Virgin Islands ESRD consumers were analyzed by sex, race, and cause of death. The primary cause of death reported in 2009 continued to be cardiac (63%). Of all deaths reported in 2009, 7.5% were white, 80% black, 10% multiracial; 58% were male, 42% female. Because race and ethnicity data are inherently unstable, these percentages should be interpreted with caution.

Transplantation – Virgin Islands

There is no renal transplant center in the US Virgin Islands, but 5 dialysis patients were able to receive transplants at off-island transplant centers in 2009. Four of these patients were transplanted in the Washington, DC, area and one was transplanted in Texas.



B. Network Structure

Staffing

Professional and clerical staff conducted daily activities of the Network under the direction of the Board of Directors and in accordance with federal guidance.

Names and Titles of Staff

Network Three is required under contract by CMS to employ an Executive Director and to adequately staff the Network in order to perform the requirements of the scope of work. The names and key responsibilities of Network staff (as of June 30, 2010) are provided as follows:

Christopher Brown, BS, Executive Director

- Administered the financial and operational aspects of the contract
- Provided advice to the Network governing bodies on goals, objectives, work plans, policies and procedures
- Maintained external relations through ongoing communication with other agencies, state programs and the general public
- Assures quality and timely completion of contract deliverables
- Supervised daily operations

Beverly Hoek, RN, CNN, Quality Improvement Director

- Provided oversight for all quality improvement efforts
- Planned future project implementation and worked with individual facilities
- Organized and attended Medical Review Board meetings, provided display and analysis for the Medical Review Board
- Conducted quality improvement projects and trend analysis, compiled reports
- Assisted in data collection
- Served as a resource for providers and facility quality improvement staff

Karen Ripkey, RN, BSN, CNN, Quality Improvement Coordinator

- Assisted with the conduct of improvement activities, including data collection, analysis and writing reports.
- Performed on-site facility visits, did clinical data review, responded to consumer problems

June Chronic-Huhn, MPA, RN, CNN, Senior Quality Coordinator (part-time)

- Assisted with the conduct of improvement activities, including data collection, analysis and writing reports.
- Performed on-site facility visits, did clinical data review, responded to consumer problems



Community Outreach Coordinator (part-time)

- Planned and facilitated education, information dissemination and training for ESRD professionals, patients and their family members and other members of the community
- Worked in collaboration with the New Jersey Renal Coalition, the State Department of Health, the Quality Improvement Organization and other professional organizations

Joan Wickizer, MSW, LCSW, Patient Services Coordinator

- Assumed a proactive role in the facilitation and resolution of patient and/or facility complaints and grievances
- Leads social services, community information and resource activities
- Provides technical assistance and conducts community outreach activities to patients and providers
- Coordinated Patient Advisory Committee and focused their activities
- Wrote patient newsletters and developed or identified new educational material for dialysis unit personnel and patients
- Promoted an increased awareness of treatment options and rehabilitation through educational programs

Chris Milkosky, Data Manager

- Developed data analysis and statistical reports
- Assured computer support operations, validation, testing and design of special programs to implement federal directives
- Assured the confidentiality and security of patient data, maintenance of computer systems and updated the patient and facility-specific database
- Served as a resource to providers and Network staff

Cheryl Brown, Data Clerk

- Performed data entry of medical forms and monthly patient census reports, resolved discrepant reporting, monitored the accuracy and completeness of the database, filed completed forms
- Maintained phone contact with facility staff to answer questions regarding completion of forms and to obtain missing data.

Tricia Phulchand, BS, Office Manager

- Provided administrative support to all staff
- Supervised data clerk
- Monitored all project submissions as well as assisted in the implementation of facility testing of CROWNWeb
- Monitored complete and timely data submission
- Assisted in meeting arrangements, supervised all bulk mailings and supported QI activities

These individuals provided the clinical and administrative expertise to assure reliability of statistical data and oversight of quality improvement activities.



Operations

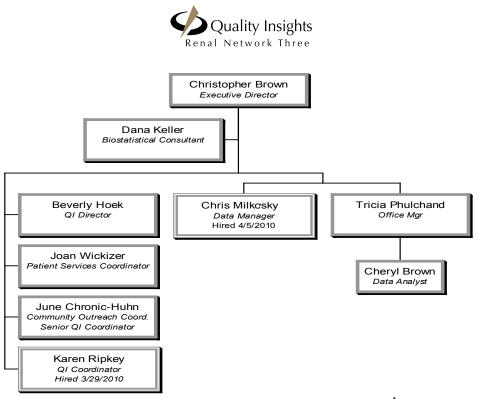
There are two major functions within the operation of the Network: quality improvement and data management. It could be maintained that quality improvement is the sole function of the Network and data analysis serves only to focus and measure the quality improvement function.

Quality improvement personnel were responsible for staffing the Medical Review Board and all related activities, the federal electronic lab (eLab) data collection, local quality improvement activities and educational programming. Staff prepared draft material for review by the Medical Review Board, monitored developments in the field, reviewed reports submitted by each facility and analyzed comparative results. Facility site visits and regional training sessions were conducted when appropriate.

Data management personnel were responsible for all data input, report production, generation of flash drives and transmission of data to CMS. They subjected data to tests of statistical significance and interpreted results for clinical personnel as well as assisted in designing studies and producing reports.

Clerical personnel prepared documents, correspondence and general mailings as well as maintained files in a manner consistent with usual office practice.

Figure 11. Network Staff Structure



Governance and Committees

The WVMI Board, the Network Board of Directors, the Network Medical Review Board and the Patient Advisory Committee support and facilitate Network operations. Other committees and subcommittees are established when the need arises. Board and committee members include representatives from dialysis and transplant facilities, as well as other strategic organizations in the Network's jurisdiction. Each Board has at least two consumer representatives. The involvement of the consumer representatives is vital to the success of the Network activities and to improving the quality of care and life for the ESRD patients.

WVMI Board of Directors

WVMI is governed by a 16-member board of directors, consisting of physicians, business representatives and consumers. The Board sets corporate policies and assures the orderly and efficient operation of WVMI and Network Three. The Board has fiduciary oversight responsibility for Network Three and reviews its activities as reported by the ESRD Executive Director, Christopher Brown, and the Network Board of Director Chairperson, John Wiesendanger. The Board considers and acts on the recommendations from the Network Board of Directors. In addition, beneficiaries serve as representatives of the community. The names, primary professional affiliations, and locations of the WVMI Board are as follows:

Derrick L. Latos, MD Nephrologist Wheeling, WV

William Davis Consumer representative, Medicare beneficiary Morgantown, WV

Joann Hasse Consumer representative Wilmington, DE

John C.S. Kepner, Esq. The Leland Group East Norriton, PA

Robert MacGregor Director of Business Development Scranton, PA

Robert Rose, MD Surgeon Elkins, WV



Network Council

The Council provided broad direction and guidance in the development of goals for selfcare, transplant referrals and criteria selection for monitoring performance of providers and plans for improvement.

Representation on the Council was multidisciplinary, culled from professionals with demonstrated expertise in their specific field and representative of the geographic characteristics of the Network. In an effort to increase communication between the providers and the Network staff, two branches of the Council were formed in 2009; the New Jersey branch and the Puerto Rico and U.S. Virgin Islands branch. Quarterly conference calls were held with each branch and discussions focused around the specific geographic area.

The following charts illustrate the Council's composition. Toros Kapoian, MD, is the Chairperson for the Network Council.

New Jersey Members included:

Members	Title	Location
Thomas Amitrano	Administrator	Paterson, NJ
Denise Baluyo	Clinic Manager	Neptune, NJ
Ken Brown	Administrator	Elizabeth, NJ
Mary Buckley-Odell	Administrator	Morristown, NJ
Ling Chang	Clinic Manager	Newark, NJ
Karen Craig	Clinic Manager	Union City, NJ
Joanne Coderre	Clinic Manager	Manahawkin, NJ
Nicole Damiano	Clinic Manager	Red Bank, NJ
Debra DiNuzzo	Administrator	Eatontown, NJ
Pamela Firely	Director	Washington, NJ
Alan Hoffman	Dialysis Consumer, PAC	Glen Rock, NJ
Maria Jacoby	Clinic Manager	Camden, NJ
Erin Jones	Clinic Manager	Atlantic City, NJ
Sue Juliano	Administrator	Teaneck, NJ
Phyllis Leggett	Social Worker	Vineland, NJ
Patty McCann	Administrator	Sewell, NJ
Remelyn Mercado	Administrator	Orange, NJ
Beckie Michael	Nephrologist	Marlton, NJ
Peggy Navitski	Consultant	Bethlehem Twp, NJ
Ann Panten	Dietitian	Brick, NJ
Arlene Paquet	Administrator	Fairlawn, NJ
Pamela Peterson	Administrator	Atlantic City, NJ
Linda Powell	Dietitian	North Brunswick, NJ



Members	Title	Location
Alex Punchello	Administrator	Marlton, NJ
Paula Ruiz	Administrator	Hackensack, NJ
Maria Singh	Hemodialysis Technician	Irvington, NJ
Brenda Stutz	Administrator	Bridgeton, NJ
Brigida Suening	Administrator	Hoboken, NJ
Barbara Stewart	Administrator	Brick, NJ
Wilfreda Dougert	Clinic Manager	Lawrenceville, NJ
Lauren Webster Garcia	ANNA, Chapter Treasurer	Morristown, NJ
Kathie Vnenchak	Administrator	Succasunna, NJ
John Wilczenski	Administrator	Middletown, NJ

Puerto Rico and the U.S. Virgin Islands Members included:

Members	Title	Location
Felicita Bonilla	Administrator	Concepcion, PR
Ana Carrero	Clinic Manager	Aguadilla, PR
Luz Otiz Castro	Clinic Manager	Canovanas, PR
Maria M. Cuevas	Clinic Manager	Lares, PR
Elizabeth Dejesus	Clinic Manager	Rio Piedras, PR
Luis Emanuelli	Regional Director	San Juan, PR
Evelyn Figueroa	Regional Manager	San Juan, PR
Noemi Figueroa	Clinic Manager	Carolina, PR
Carmen Flores	Clinic Manager	Caguas, PR
John Gage	Special Projects	San Juan, PR
Wishburne Hunte	Nephrologist	St. Thomas, USVI
Mariluz Lopez	Clinic Manager	Arecibo, PR
Ivette Maldonado	Clinical Coordinator	Guaynabo, PR
Luis Maldonado	PD Nurse	Toa Baja, PR
Maria Elena Marrero	Clinic Manager	Carolina, PR
Carmen M. Melendez	Clinic Manager	Caguas, PR
Carmen Montalvo	Clinical Coordinator	Mayaguez, PR
Pascual Muniz	Regional QI Manager	Aguadilla, PR
Azucena Negron	Regional Manager	Arecibo, PR
Ivette Nolasco	Clinic Manager	San Juan, PR
Nydia Ocasio	Clinic Manager	San German, PR



Members	Title	Location
Delphine Olavacce	Clinical Coordinator	St. Thomas, USVI
Waleska Olavarria	Clinic Manager	Ponce, PR
Priscilla Ortiz	Clinic Manager	Mayaguez, PR
Jovanna Perez	Clinic Manager	Fajardo, PR
Ivonne Ramirez	Clinic Manager	San Juan, PR
Sonia Ramos	Clinic Manager	West Ponce, PR
Marie Ines Rebollo	Director of Nursing	San Juan, PR
Elizabeth Rodriguez	Clinic Manager	Arecibo Norte, PR
Wanda Torres Rodriguez	Administrator	Aguadilla, PR
Awilda Rodriguez	Regional Manager	Aguadilla, PR
Ivette Rodriguez	Administrator	St. Croix, USVI
Janet Rivera Diaz	Clinic Manager	San Juan, PR
Ana Santi	Clinic Manager	Guaynabo, PR
Aida Serrano	Clinic Manager	Mayaguez, PR
Blangie Torres Carlo	Regional Manager	Ponce, PR
Evelyn Valle	Clinic Manager	Isabella, PR
Susanna Vazquez	Administrator	San Sebastian, PR
Damaris Vazquez	Dietitian	Ponce, PR
Gloria Vega	Dialysis Nurse	San Juan, PR
Blondell Williams	Vice President, PCS	St. Thomas, USVI

Medical Review Board

The Medical Review Board evaluates the appropriateness of ESRD care, treatment procedures, and services delivered to ESRD consumers. The prescribed composition of the Medical Review Board is: twelve (12) members and a chairperson from the following categories: a minimum of one physician board-certified in nephrology, an experienced nephrology registered nurse responsible for nursing services, a licensed renal social worker, a registered renal dietitian and two patient representatives. The MRB consists of prominent and dedicated members of the renal community who volunteer their time.



Members included:

Chairperson	Title	Location
Paul Fine	Nephrologist	Morristown, NJ
Members	Title	Location
Ira Strauss	Nephrologist	Manalapan, NJ
Sadanand Palekar	Nephrologist	Newark, NJ
Padmaja Kodali	Nephrologist	East Orange, NJ
Pedro Vergne	Nephrologist	Dallas, TX
Joshue Castresana	Nephrologist	Cayey, Puerto Rico
Walter Gardiner	Nephrologist	Saint Croix, U.S. Virgin
		Islands
Cori Nunziata	Social Worker	North Brunswick, NJ
Ann Panten	Dietitian	Brick, NJ
Arlene Paquet	RN, Administrator	Fairlawn, NJ
Patricia Madden	RN, Administractor	Sewell, NJ
Kathy Searson	RN, Peritoneal Dialysis	North Brunswick, NJ
Rosemarie Acuna	Transplant Consumer	Livingston, NJ
Mani Swaminathan	Dialysis Consumer, PAC	Lakewood, NJ
	Member	

Board of Directors

The Board of Directors consists of twelve (12) members. The Board of Directors was composed of two consumers, one dietitian, one social worker, two administrators, one nurse, three physicians a Chair and physician Vice Chair. One board member was from Puerto Rico, one from the U.S. Virgin Islands, and the Chair resides in West Virginia with the remainder being from New Jersey. The chart below shows the Board's composition.

Members Included:

Chairperson	Title	Location
John Weisendanger	Quality Insights CEO	West Virginia
Vice Chairperson	Title	Location
Vice Chairperson	Title	Location



Members	Title	Location
Ron Zanger, MD	Nephrologist	Cherry Hill, NJ
Phyllis Micchelli, MSW	Social Worker	East Orange, NJ
Chandra Chandran, MD	Nephrologist	Paterson, NJ
Paula Ruiz de Somocurcio	Registered Nurse	Hackensack, NJ
Ramesh Lakhram, MD	Nephrologist	Saint Croix, U.S. Virgin Islands
Ken Noonan	Consumer	Neptune, NJ
Mary Lorenzo, MSW, LSW	Consumer	Matawan, NJ
Judith Semptimphelter	Administrator	Bridgeton, NJ
Marien Saade	Administrator	San Juan, Puerto Rico
Sheri Dubinsky, RD	Dietitian	Toms River, NJ

To further assure a broad perspective on appropriateness of care and outcome measurements, a transplant surgeon, vascular access surgeon and board certified pediatric nephrologist may serve on the board or as a consultant. These members are selected based on their expertise to further promote the goals and objectives of the Network.

Patient Advisory Committee

The Patient Advisory Committee (PAC) was organized in 2006 with patient volunteers from throughout the Network. The mission of the Patient Advisory Committee is to support the mission of Network Three to enhance the quality of care provided to ESRD patients and to represent and support the ESRD patient population by actively participating in the committee responsibilities and related functions.

The committee was charged with providing consumer advice to the boards and other committees on such matters as, but not limited to, quality improvement activities; content and format of the Network's Website; content and format of patient educational material; improvement of communication between consumers and facility staff; direct attention to areas/issues of consumer concern. Committee members attend meetings or conference calls and actively participate in the development of patient education programs and the PAC newsletter, *Kidneys R Us*.



Membership included:

Chairperson	Modality	Location
Kenneth Noonan	Hemodialysis	Neptune, NJ
Members	Modality	Location
Jamie Alonzo	Hemodialysis	San Juan, PR
Eric Blocker	Peritoneal Dialysis	Cranbury, NJ
Terence Boyle	Transplant	Elmwood Park, NJ
John DiFabio	Transplant	Harrington Park, NJ
Angelica DiNatale	Transplant	Hamilton, NJ
Louis Elder, Jr	Hemodialysis	East Orange, NJ
Alan Fink	Hemodialysis	Manalapan, NJ
Alan Hoffman	Hemodialysis	Glen Rock, NJ
Hedwig Hoffman	Spouse	Glen Rock, NJ
Joseph Jean Marie	Transplant	Roselle, NJ
Kye Martin	Hemodialysis	Christiansted, VI
Courtney Murphy	Hemodialysis	Camden, NJ
Thomas Petito	Hemodialysis	Freehold, NJ
Mani Swaminathan	Transplant	Lakewood, NJ



III. CMS NATIONAL GOALS AND NETWORK ACTIVITIES

The Medical Review Board, Board of Directors and the Network Council reviewed national CMS goals promulgated in the Network's contract. The committees then formulated sub-goals and activities for the contract year. The sub-goals are used to focus attention on and promote action in specific areas of nephrology practice to attain national goals and improve the quality and delivery of health care services.

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

Supportive Activities

Network Three developed quality improvement projects with the direct guidance from its MRB and through partnerships with the Patient Advisory Committee and Network Council. The framework of these efforts was developed in a comprehensive Quality Improvement Work Plan (QIWP), addressing four major tasks:

- 1. Vascular Access (Fistula First Breakthrough Initiative) Network Three had two goals under this task:
 - a. Increase the percentage of AV fistulas by 2.8%
 - b. Decrease the percentage of catheters by 2%
- 2. Clinical Performance Measures
 - a. Anemia Management
 - b. Bone Management
- 3. Facility Specific Quality Improvement
 - a. End of Life Care
 - b. Immunizations
- 4. Network Specific Quality Assessment Performance Improvement (QAPI)
 - a. Anemia management Hgb >13 gm/dl
 - b. Increase AV fistulae rates
 - c. Focused facility monitoring U.S. Virgin Islands



Network Results

1. Vascular Access (FFBI)

a. Increase the percentage of AV fistulas by 2.8%

In 2003, CMS launched with all Networks the National Vascular Access Improvement Initiative, now called the Fistula First Breakthrough Initiative. The project was based on the NKF-KDOQI guidelines, which stated that 65% of prevalent hemodialysis patients should use an arteriovenous fistula and 50% of the incident patients should use an arteriovenous fistula. Hemodialysis patients with fistulas have improved morbidity and mortality outcomes.

Since the inception of the Fistula First initiative in 2003, Network Three has sponsored educational programs for vascular surgeons, nephrologists, and nurses in New Jersey, Puerto Rico and the US Virgin Islands. Figure 11 illustrates the improvements in the rate of AV fistulas used in Network Three from December 2001 through December 2009.

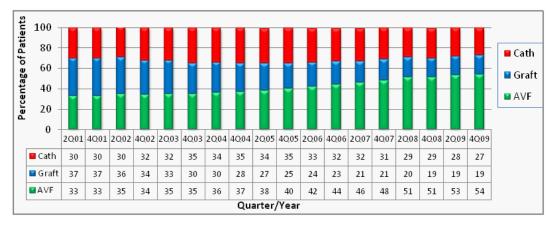


Figure 12. AV Fistula Rates in Network Three June 2001 through December 2009*

*Source Fistula First Dashboard

Each year the Network was challenged by CMS to achieve an established goal. During 2009, the Network's goal was to increase the prevalent AV fistula rate by 2.8% by March 2010. According the March 2010 data, Network Three exceeded the CMS goal by 0.2%.



Figure 13 demonstrates the improvement in AV fistula rate from December 2008 through December 2009.

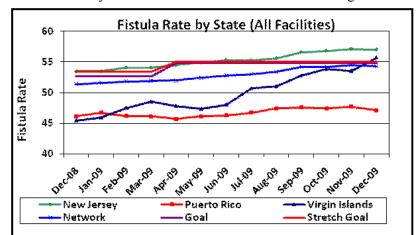


Figure 13 Fistula Rate by State and Network December 2008 through December 2009*

*Source Fistula First Dashboard

b. Decrease the percentage of catheters by 2% annually

The USRDS Morbidity and Mortality Study Wave 1 showed that patients receiving catheters and grafts have greater mortality risk than patients dialyzed with fistulae. In December 2008, 4,166 patients used catheters as the primary access. As of December 2009, 4,074 patients used a catheter as a primary access which is a decrease of 2.2%. However, that number constitutes 26.7% of the total hemodialysis population.

Figure 14 illustrates the percentage of catheters used as a primary access from December 2008 through December 2009. The Network Boards challenged the facilities to decrease the prevalent catheter rate by 2% annually. According to the March 2010 data collection, the Network exceeded the Board goal and decreased the catheter rate by 2.5% since March 2009.



Catheter Rate by State (All Facilities)

40

35

30

25

40

36

27

28

29

20

15

10

Puerto Rico

Network

Puerto Rico

Virgin Islands

Network

Figure 14 Catheter Rate by State and Network December 2008 through December 2009

*Source Fistula First Dashboard

Quarterly Vascular Access Reports

The Network is required by contract to collect vascular access data from 100% of eligible facilities using the Fistula First Data Collection Tool. Facilities report the number of fistulae in use, the number of catheters only, the number of catheters with fistulae and grafts maturing and the number of catheters > 90 days. Network Three developed a facility-specific report which illustrates the percentage and the number of patients with each type of vascular access. The data is reported monthly and distributed to 100% of Network facilities on a quarterly basis to the Medical Director and Administrator.



Figure 15 Example of Fistula First Report Card

Medical Director Report Cards

The Network collaborated with the New Jersey Renal Coalition and developed the Medical Director Report Card. The Report Card was utilized to encourage the Medical Director to examine the facility practice patterns and decrease the percentage of catheters used. The Report Card was distributed quarterly to the Medical Director and ranked the facility within the State by percentage of AV fistulae and catheters. A comparison of the current data to the previous quarter was provided. In addition, the report provided the physician with the number and percentage of incident patients initiating dialysis with a catheter. A comparison to the previous quarter was provided. Included in each report was a reminder of the FFBI Change Concepts. A different concept was quoted at the bottom of each quarterly report. The data used for this report was collected from the vascular access data collection tool and the CMS- 2728 form.



February 2010 Facility Name: ARE YOU SATISFIED WITH YOUR FACILITY'S AVF RATES? Fistula Improvement Indicators Prevalence (September 30, 2009) Rank 1 of 116 state facilities Month-end prevalent catheter rate:
 (December 31, 2009)
 Rank (September 30, 2009) 9 of 116 state facilities Incidence Total number of first starts: % first starts with fistula access in use % first starts with catheter access only Total number of first starts: % first starts with catheter access only

Figure 16 Example of Medical Director Report Card

Site Visits - Facility and Hospital

Site visits have proven to be the most successful intervention utilized by Network Three for the improvement in fistula placement and catheter reduction. Facility data were sorted and analyzed by Network staff and facilities with the highest percent of catheters, and the lowest percent of AV fistulae were targeted for intervention. The site visits focused on evaluating the vascular access program and provided recommendations and resources to improve the facility process. Progress was evaluated monthly and repeat visits were conducted based on outcomes. Facilities failing to demonstrate sustained improvement were required to develop and submit quality improvement plans and, where indicated, the Medical Director was asked to report directly to the Network Medical Review Board his/her plan for improvement.

In June 2009, the Network identified five facilities (4 in New Jersey and 1 in Puerto Rico) that failed to demonstrate improvement despite multiple site visits, improvement plans and Board intervention. The Network Boards recommended the consideration of sanctions. In lieu of sanctions, CMS contacted the facility Medical Director in writing and requested a 10% increase in the number of functional fistulae by October 5, 2009, and an additional 10% by February 1, 2010. One hundred percent of the facilities met or exceeded the October 5, 2009, goal. The targeted facilities had a total of 225 prevalent patients with AV fistulae at baseline. As of December 2009, the targeted facilities had 271 prevalent patients with AV fistulae, a 20% improvement.



Hospital site visits were performed at hospital-based dialysis facilities and hospitals without outpatient dialysis facilities. Selection criteria included hospital-based dialysis facilities with low AVF rates and high catheter rates or primary vascular access hospitals located in an area of lower performing facilities. Hospital administration, performance improvement staff, the Chiefs of Surgery and Medicine, plus the dialysis leadership attended the meeting. Topics included vessel preservation, use of PICC lines, early referral to vascular surgeon, discharge planning, early identification of CKD, operating room availability, surgical outcome tracking and local best demonstrated practices. This initiative will be expanded in 2010 to include additional non-dialysis hospitals; scheduling has been a challenge for this group due to the lack of knowledge of the renal community.

Corporate Involvement

Large dialysis organizations (LDO) have a distinct advantage over independent facilities due to the abundant corporate resources and strong technical support; however, when vascular access data were sorted and tracked by facility type, the independent facilities far out performed the Network LDOs.

Historically, Network contact was limited to local regional administrators, but in an effort to assist the LDOs meet the CMS and Network goals, Network staff contacted corporate level quality improvement staff of the largest Network LDO. Collaborative efforts began in April 2009 and focused on twenty-one facilities located in Puerto Rico. Interventions included conference calls, meetings with Medical Directors and nursing leadership, and development of comprehensive quality improvement plans. One initiative was considered the most influential; the LDO contracted with a consultant who was a highly respected nephrologist from Puerto Rico who now lives in Texas. Under his leadership many changes that were considered impossible in the past were implemented under his direction. Surgeons who refused to insert AV fistulae were replaced at an area hospital, vascular surgeons were recruited from the United States to open practices in areas of Puerto Rico lacking local resources, smaller area hospitals were educated on the risks of temporary non-tunneled catheters and provided with information on purchasing and inserting tunneled catheters, and the facilities reported barriers and outcomes directly to the consultant.

Figure 16 illustrates the improvement achieved from March 2009 to December 2009. The AVF rate increased by 2.1 percentage points and the catheter rate decreased by 3.5 points.



Access Rates at Intervention Facilities

45

40

40

35

30

25

Andre Rate Intervention Facilities

Fistula Rate

Catheter Rate

Figure 16 Fistula and Catheter Rates at Intervention Facilities March – December 2009

*Source Fistula First Dashboard Data

Due to the success of this collaborative effort, the Network has expanded the initiative to include the lower performing facilities in New Jersey within the same LDO.

Education

Network Three participated in three vascular access educational programs on September 24, 2009, October 1, 2009, and October 8, 2009. The programs were offered by a local vendor and were held in north, south and central New Jersey. The objectives of this program entitled Vascular Access Assessment and Condition for Coverage Requirements, were to educate staff on the physical assessment of the vascular access and discuss the Conditions for Coverage related to vascular access. Contact hours were awarded by the American Nephrology Nurses Association (ANNA), and the programs were attended by over 100 dialysis nurses and patient care technicians.

Site visits are considered an educational opportunity, and the Network takes this opportunity to discuss important issues which include:

- Vascular access monitoring
- Cannulation competency and first treatment protocols for new AVFs
- Fistula maintenance, maturation and evaluation
- Informed consent for continued use of a catheter
- Tracking outcomes by surgeon
- Converting failing AVGs to AVFs
- Clinical pathways for vascular access
- Developing QAPIs
- An educational CD is provided that contains FFBI resources and Websites.



During the Network's Annual Council Meeting held on November 19, 2009, Toros Kapoian, MD, Vice Chair of the Network Board of Directors, presented CMS National and Network Goals and Activities.

Quality Assessment Performance Improvement Plans (QAPI)

On April 23 and 24, 2009, the Network held two Vascular Access QAPI workshops in San Juan, Puerto Rico. The attendees were divided into groups and provided with facility specific vascular access reports for the facility they represented. Each group developed a quality improvement plan, including root cause analysis, goals and timelines for improvement. The QAPIs were reviewed for completeness and content and recommendations for revisions were offered.

2009 ESRD Clinical Performance Measures

Annually, for approximately fifteen years, CMS collected clinical performance measures (CPM) data from a scientifically selected ~5% sample of the patient population. More recently they added the National ESRD Electronic Lab Data (Elab) that collected data for a national set of measures from 100% of eligible dialysis patients in clinical areas that included dialysis adequacy, anemia management, nutrition, bone management and vascular access.

In 2008, the CPM data collection was suspended, and the Elab Data became the only source of clinical performance data provided to the Networks.

Based on this data collection the MRB established the following goals for 2009-2010:

Indicator	Goal
Anemia management Hgb 10-12g/dL	55%
Dialysis adequacy URR ≥65%	92%
Dialysis adequacy Kt/V>1.2	96%
Mean albumin >4.0/3.7g/dL	36%
Mean TSAT >20%	87%
Mean Ferritin 100-800 ng/mL	66.7%
Adjusted calcium 8.4-10.2 mg/dL	83%
Mean phosphorus 3.5-5.5 mg/dL	55%
Fistula rate prevalent patients	66%
Catheter reduction	2%
Fistula rate incident patients	50%
AV stenosis monitoring	100%
Catheters >90 days	<10%



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Facility level statistics provided through the data collection effort were analyzed, and if results were less than the national average or less than the threshold established by the Medical Review Board, facility caregivers were to develop internal improvement efforts in the area. Annually, the clinical performance measures report is distributed to each facility to provide comparative clinical data that can be reviewed against facility performance.

a. Anemia Management

Anemia is an almost constant complication of chronic renal failure that significantly contributes to the symptoms and complications of the disease. On June 1, 1989, the FDA approved the first erythropoiesis-stimulating agent (ESA), Epogen, for treatment of anemia in kidney dialysis patients.

In 1997, the NKF published the first Kidney Disease Outcome Quality Initiative (NKF-KDOQI) Clinical Practice Guideline and Clinical Practice Recommendations for Anemia in Chronic Kidney Disease. Since then there have been two updates, the most recent of which was in 2007. The indication for the most recent update was based on two randomized clinical trials (CHOIR and TREAT) which recommended hemoglobin levels stratified by risk for ESRD patients. According to NKF-KDOQI: 2.1.2 In the opinion of the Work Group, in dialysis and non-dialysis patients with CKD receiving ESA therapy, the selected Hgb target should generally be in the range of 11.0 to 12.0 g/dL. (Clinical Practice RECOMMENDATION)

In addition, NKF-KDOQI also stated that only 30% of patients at any one time have an actual Hgb level in the Hgb target range of 11.0 and 12.0 g/dL when targeted to that range. However, mean or median Hgb levels of a group of patients, or mean Hgb levels of a single patient repeated over time, would be expected to lie within a Hgb target range.

In response to the revised guidelines: Amgen, the manufacturer of Epogen, made the following recommendation: *The dose of ESA should be individualized for each patient to achieve and maintain Hgb levels between 10 g/dL and 12 g/dL.*

Historically, hemoglobin data from the CPM collection was reported as the percentage of patients with a mean Hgb >11-g/dL, and nationally, in 2007, 84% of patients in the United States were within this range. In 2008, in addition to the previously reported levels, the percentage of patients with a mean Hgb 10-12.0 g/dL was added. Nationally, the percentage in target range was 50%; the percentage of patients in Network Three was 52%. At the June 2009 Board meetings, the members analyzed the 2008 data and compared Network Three to the other Networks. Based on the Network's level (52%), the national level (50%), and the reported range from the remaining Networks (45%-56%), a goal of 55% was established. At the time of the Board meeting, the CPM data was the only "current" data available, and this data represented Oct-Dec 2007. Following the Board meeting, the Network received the 2008 National Laboratory Data report. According to data collected in the 4th quarter 2008, the Network had 55.6% of patients in target range.



Based on the 2008 National ESRD Elab Data, twenty-six facilities in New Jersey and 11 facilities in Puerto Rico had <50% of patients in target range (Hgb 10-12g/dL). The Network collected current data from 20 facilities selected for intervention to establish baseline data. Of the 20 facilities, seven in New Jersey and seven in Puerto Rico met the section criteria. The remaining facilities were placed in the non-intervention group.

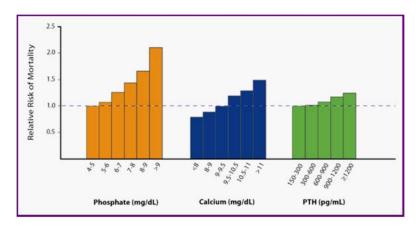
The average percentage of patients with a Hemoglobin between 10-12 g/dL at the targeted facilities in New Jersey was 47% while in Puerto Rico the percentage was 44%. Quality improvement plans were requested from all intervention facilities during July 2009. The Network reviewed the plan for content and measureable outcomes and provided feedback reports. The established goal was to increase the percentage of patients in target range (Hgb 10-12 g/dL) by 5% in three months. The deadline for achieving the goal was December 2009.

The results in New Jersey were remarkable; the intervention group increased the percentage of patients in target range by 16.7% while the non-intervention group increased the percentage in target range by 11%. In Puerto Rico, the difference was less. The intervention group increased by 10.8%, and the non-intervention group increased by 10.2%. A possible reason for this is the presence on the Network's Medical Review Board of the Medical Director of one of the larger members of the non-intervention group. He participated in the planning of this intervention, and also implemented the plan in his own unit, thus affecting the comparative results.

Bone Management

The NKF-KDOQI guidelines(Guideline 3, 3.2 state: *In CKD patients with kidney failure (Stage 5) and those treated with hemodialysis or peritoneal dialysis, the serum levels of phosphorus should be maintained between 3.5 and 5.5 mg/dL* (Evidence). Prolonged hyperphosphatemia causes soft-tissue and vascular calcification due at least in part to an increase in calcium-phosphate product and is associated with increased morbidity and mortality.

Relative Risk of Mortality Related to Levels of Phosphorus, Calcium, and PTH





Network Three launched the phosphorus initiative at the annual meeting in November 2008. At that time the goal was focused on the overall percentage of patients in target range (3.5-5.5 mg/dL). Based on 2008 CPM data collection, 53 percent of Network patients had a phosphorus level between 3.5-5.5 mg/dL. This was 1% above the national average of 52%. Thirteen percent of the patients had a phosphorus level >7mg/dL. The goal was to increase the percentage of patients in target range by 2% annually. At the June 2009 Board meeting the members requested a change in direction and identified twenty-seven facilities with > 10% patients with phosphorus <7 mg/dL and more than 100 prevalent patients for targeted intervention.

Two groups were selected, one containing 13 facilities for targeted intervention, the other 14 facilities for non-intervention. The goal of the targeted intervention was to decrease the number of patients with a phosphorus >7mg/dL by 20% in three months.

In September 2009, the Phosphorus Buddy concept was introduced to the targeted facilities. The facilities were asked to develop and institute a phosphorus reduction program by the end of October and were given the option to utilize the Phosphorus Buddy concept or any other method that would ensure positive outcomes.

Data collection began in November and the percent of patients with a Phosphorus > 7mg/dL dropped by 7.3%. During the same time period, at 14 non-intervention facilities in the same geographic area, the percentage of patients with a phosphorus >7mg/dL dropped by 3.5%.

Results from December 2009 were not as hopeful. The improvement was sustained by the intervention group. However, when compared to the non-intervention group, there was a significant difference. The non-intervention group saw a 17.5% increase over baseline, demonstrating that the focused intervention was successful.

By January 2010, nine of the thirteen intervention facilities met the 20% reduction goal. Overall there was a 16.7% reduction in the number of patients with a phosphorus >7mg/dL compared to a 1.7% reduction in the non-intervention group.

Network-wide the percentage of patients with a PO4 > 7 mg/dL decreased from 13.3% to 11.6%. The number of patients with a PO4 > 7 mg/dL decreased from 1,094 to 985, and the number of patients with a PO4 > 8 decreased from 807 to 738. This is particularly striking in light of the fact that the total number of patients increased from 14,278 in January to 14,871 in December.

The chart below demonstrates the steady improvement the facilities have made in achieving Network goals between 2005 and 2009. The 2009 comparative data for the U.S. were not available at the time of this report. As noted, the clinical parameters have changed over the years to reflect current practice guidelines, and the results are reported based on the target range for the specific year.



CMS/Network Three Goal Attainment Progress

Measures	NW Goal	2005	2006	2007	2008	2009	U.S. (2008)
Mean Hgb 10-12 g/dL	55%			47%	55.6%	61.7%	56.8%
Mean URR >= 65%	92%	88.8%	89.4%	89.9%	91.3%	93.1%	89.4%
KT/V >1.2	96%	92%	94.1%	94.5%	95.1%	96.3%	94.4%
Mean Alb >= $4.0/3.7 \text{ g/dL}$	36%	35.5%	36.2%	34.6%	35.7%	36.0%	34.5%
Mean TSAT >= 20%	87%	77.9%	79.2%	81.3%	87.1%	87.6%	85%
Mean Ferritin in range	66.7				65.7%*	58.7%**	63.5%*
Adjusted Calcium 8.4-10.2 mg/dL	83%		81%	86%	81.3%	81.9%	82.6%
Mean Phosphorus 3.5-5.5 mg/dL	55%		52%	51%	56%	57.4%	52.6%
Prevalent Patients AV Fistulas	66%	34%	39%	44%	49%	54.3%***	49%
Incident Patients AV Fistulas	50%	43%	48%	38%	48%	37.9%***	31.6%
Prevalent Patients Catheter > 90 days	<10%	31%	29%	26%	23%	12.5%	21%
AVG Stenosis monitoring	100%	57%	55%	73%	72%	N/A	71%

* Range 100-800 ng, ** Range 200-800 ng, *** FFBI dashboard 2005-2007 CPM data collection, 2008-2009 National ESRD Elab data collection

Network Specific Quality Improvement

End of Life Care

According to the 2004 USRDS report, hospice services are utilized by 13.5% of ESRD patients as compared to 25% of non-ESRD patients. Less than 50% of ESRD patients withdrawing from dialysis receive hospice care prior to death. The barriers for utilization of the hospice benefit with ESRD patients may include confusion about eligibility and withdrawal, thought to be a prerequisite for initiation of hospice.

The cost of care increases significantly in the last weeks of life. The utilization of hospice helps reduce costs irrespective of withdrawal from dialysis (Murray and Moss 2005). Cost savings for patients not withdrawing from dialysis would be derived from a reduction in hospitalizations in the final weeks of life.

The weekly cost of dialysis is less than four hundred dollars, according to Murray and Moss. Among patients who withdrew from dialysis and used hospice, median cost of perpatient care during the last week of life was \$1,858, compared with \$4,878 for non-hospice patients (P<0.001); hospitalization costs accounted for most of that difference. Only 22.9%



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of dialysis hospice patients died in the hospital, compared with 69% of non-hospice patients (P<0.0001). A minority of dialysis patients use hospice, even among patients who withdraw from dialysis, whose death usually is certain. Increased hospice use may enable more dialysis patients to die at home, with substantial cost savings.

The focus of this project was to educate the renal professionals about the availability of hospice to the ESRD patients and to see an increase in the number of patients who receive hospice care prior to their death. Understanding the Medicare Hospice Benefit will enable the renal professionals to inform their patients about the availability of hospice. This information can then be utilized by the patients and their families to help them in their end-of-life decision-making.

At the Annual Network Meeting on November 19, 2009, Michael Germain, MD, presented on hospice and palliative care and the importance of making this treatment option available to renal patients. Prior to the meeting, Network Three conducted an environmental scan of facility administrators to determine whether or not they incorporated hospice referral into their plan of care meetings. Of the 82 administrators who responded, 38 (46%) responded "yes" and 44 responded "no."

A follow-up scan was sent out to the same administrators following the educational meeting, asking them if they would now incorporate the discussion of hospice into their plan of care meeting. Of the 74 who responded to this scan, 64 (86%) responded "yes" and 10 responded "no." The goal of this project was to increase by 50% the facilities that would change the care plan process and consider the referral of appropriate patients for hospice during the monthly care plan meetings. The Network exceeded this goal and increased by 68% the number of facilities that planned to change the care plan process to include the consideration of hospice referral.

Immunization

The purpose of this project was to ensure that Network independent facilities had a written plan for influenza containment and distribution of the H1N1 vaccine when it became available. Independent facilities often lack the benefit of a corporate structure to formulate new policies and procedures as circumstances warrant. The CDC had provided specific instructions for the care of hemodialysis patients. These recommendations supplement the Centers for Disease Control and Prevention's Interim Guidance for Infection Control for Care of Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection in a Healthcare Setting. Network Three ensured that >50% of independent facilities had a written policy and were prepared to follow the CDC's recommendations for containment and immunization.

An environmental scan was developed and distributed to all Network facilities. Results were sorted by type of facility- LDO, independent, or hospital-based. Facilities that failed to respond were contacted and asked to complete the scan. Facilities that confirmed having a policy in place were asked to share the policy with the Network.



By October 31, 2009, 75% of the Network independent facilities incorporated the CDC guidelines for H1N1 into their infection control plan. The CDC website was emailed to all the dialysis facilities, and 100% of the independent facilities were provided with the Vaccination Toolkit developed by the Forum of ESRD Network's Medical Advisory Committee.

Facility Specific Quality Assessment and Improvement

In June of each year, the MRB assigns each provider with a vascular access goal for fistula-in-use and catheter reduction. The goals are based on the March data and range from 1% to 3%.

Monthly data were analyzed, and nineteen facilities failing to demonstrate sustained improvement were required to submit a quality improvement plan to increase the use of AV fistulas in prevalent patients. The selection criteria included a fistula rate less than 45% and more than 90 prevalent patients as of April 2009 data. Eleven facilities were located in Puerto Rico and eight in New Jersey and represented 2409 patients. The goal of the project was to increase the prevalent fistula rate by 3% within three months. QAPIs were submitted, reviewed, and feedback reports were provided. Progress was monitored monthly, and by December 2009, eighteen of the facilities met or exceeded the goal. The facility that did not show improvement was located in Puerto Rico and was targeted for intervention by corporate leadership.

The targeted facilities had an average fistula rate of 37.4% in April 2009. As of December 2009, the targeted facilities had an average of 44.2% which was an overall 6.8 percentage point improvement.

Anemia Management Hgb >13 g/dL

NKF-KDOQI CPG AND CPR 2.1 HEMOGLOBIN TARGET 2.1.2 states: *In the opinion of the Work Group, in dialysis and non-dialysis patients with CKD receiving ESA therapy, the selected Hb target should generally be in the range of 11.0 to 12.0 g/dL.* (Clinical Practice RECOMMENDATION)

2.1.3, In dialysis and non-dialysis patients with CKD receiving ESA therapy, the Hb target should not be greater than 13.0 g/dL. (Clinical Practice GUIDELINE - MODERATELY STRONG EVIDENCE).

Network Three reviewed the 2008 ELab Data reports from 100% of Network facilities which reflected data from the 4th quarter 2007. Fifteen facilities were identified with > 100 prevalent patients and >30 patients with a hemoglobin >13g/dL; nine facilities were located in Puerto Rico. Network Three reviewed the facility specific anemia management reports from the targeted facilities for October through December 2008. Network staff



discovered poor compliance with stated policies for ESA administration and iron management. Patients experienced wide variations in Hgb levels from very low (7-8gm/dL) to very high (15-16 gm/dL) within the reported three month time period. One facility was noted to have >60% of patients with a ferritin level >800. While this can have multiple causes, the excessive use of iron compounds was evident.

The goal of the intervention was two-fold:

- 1. Decrease the percentage of patients at each facility with a rolling three month average Hgb >13g/dL by 5% quarterly.
- 2. Evaluate individual facility compliance with ESA and IV iron administration policies and provide education through local resources.

Since the nine facilities were all part of one LDO, the Network contacted the regional QI manager and requested his feedback on the submitted data. The initial response was a reiteration of the anemia management policies and a plan for re-education of the anemia managers. The plan did not address iron management or the huge variations in hemoglobin levels which placed the patients at significant risk of increased mortality.

Due to the extreme circumstances, Network staff contacted the corporate headquarters to request assistance and policy clarification. After a review of the data, several regional quality improvement staff traveled to Puerto Rico and provided clarification of corporate policies and re-education for clinical staff and anemia managers. A meeting was held with the facility medical directors to provide corporate views of anemia and iron management.

The Network requested and received nine facility QAPIs that did not include goals or indicators to monitor improvement. The Network contacted the corporate staff and requested revised plans to include missing elements. Two additional versions were submitted before accepting the plans. The Network met with the corporate PI leaders and medical directors in PR in April 2009 and discussed strategies to improve quality outcomes related to anemia and iron management.

As you can see from the data that follows, progress was made and sustained. An 8% goal was established for the facilities in Puerto Rico, and this goal has been met and at times exceeded. The Network will continue to monitor semi-annually for sustainability.



Dialysis Facilities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	22.39	13.41	15.5	20.19	26.26	12.38	10.4	5.08	11.64	5.35	8.69	8.12
2	19.28	16.51	12.14	16.67	15.38	14.42	11.37	10	7.82	8.93	12.02	15.72
3	15.47	12.73	13.86	9.15	8.93	6.17	6.75	8.27	8.86	7.97	3.38	4.97
4	8.67	6.12	2.7	6.21	7.97	10.37	5.76	3.62	6.43	8.51	7.58	3.1
5	11.8	6.88	7.06	6.71	9.19	7.65	7.41	7.83	5.3	13.02	8.28	5.75
6	11.39	13.12	6.21	3.96	10.4	10.85	5.65	6.35	3.33	8.27	10.49	7.44
7	22.83	17.68	14.29	18.37	13.19	9.89	12.5	4.35	13.97	9.19	13.33	9.25
8	11.33	7.44	10.53	9.15	8.66	5.92	13.34	8.28	8.39	10.95	4.38	6.16
9	13.48	9.02	8.11	12.24	8.78	13.01	7.97	6.42	5.71	16.79	8.39	10.52
Avg	15.2	11.4	10.0	11.4	12.1	10.1	9.0	6.7	7.9	9.9	8.5	7.9

Percent of Patients with Hgb > 13 at 9 Intervention Facilities in Puerto Rico

b. Increase AV Fistula Rate

The NKF-KDOQI guidelines recommend: Guideline 2. Selection and Placement of Hemodialysis Access. A structured approach to the type and location of long-term HD accesses should help optimize access survival and minimize complications. The access should be placed distally and in the upper extremities whenever possible. Options for fistula placement should be considered first, followed by prosthetic grafts if fistula placement is not possible. Catheters should be avoided for HD and used only when other options listed are not available. Patients should be considered for construction of a primary fistula after failure of every dialysis AV access.

The rationale for this guideline: The preference of fistulae over all other forms of access arises from their functional advantages because of a lower rate of complications.

- Fistulae have the lowest rate of thrombosis and require the fewest interventions, providing longer survival of the access. The number of access events is 3- to 7-fold greater in prosthetic bridge grafts than in native fistulae.
- As a result, costs of implantation and access maintenance are the lowest.
- Fistulae have lower rates of infection than grafts, which, in turn, are less prone to infection than percutaneous catheters and subcutaneous port catheter systems. Vascular access infections in HD patients are common, can be severe, and contribute to infection as the second leading cause of death in patients with CKD stage 5.
- Fistulae are associated with increased survival and lower hospitalization.
- Patients receiving catheters (RR = 2.3) and grafts (RR = 1.47) have a greater mortality risk than patients dialyzed with fistulae.

Epidemiological evidence also indicates that greater use of fistulae reduces mortality and



morbidity.

Based on monthly vascular access data collected from 100% of eligible facilities, 19 lower performing facilities were selected for targeted intervention. The targeted facilities were divided into two groups. The first group of seven facilities had multiple unsuccessful interventions during the Fistula First initiative that included site visits, meetings with the medical directors and submission of quality improvement plans. The Board met and discussed alternatives and past performance and established a 3% improvement goal by October 31, 2009. Letters were sent to the medical directors by the Executive Director advising them if they failed to achieve this goal the Board would consider the recommendation of sanctions.

Dialysis April May June July Aug Sept Oct **GOAL GOAL Facilities MET Baseline** $\sqrt{}$ 34.5 38.2 39.8 41.6 41.4 40.8 37.5 36.4 2 $\sqrt{}$ 35.9 37.5 34.8 39.1 40.0 46.6 42.9 38.9 3 37.9 39.3 38.9 33.3 33.6 33.1 34.2 36.3 4 34.3 36.5 38 38.9 40.6 38.1 40.8 37.3 5 $\sqrt{}$ 35.1 35.3 35.8 37.2 36.7 37.5 38.4 38.1 6 $\sqrt{}$ 27.7 29.8 29.8 31.9 34.8 34.3 34.3 30.7 40.7 38.5 38.4 38.7 38.3 38.8 41.1 43.7

Fistula Rates by Month at 7 Intervention Facilities

The table above illustrates the successful goal achievement by six of the facilities. Facility 7 did not improve and may be considered for CMS sanctions.

The second group of facilities participated in less targeted interventions, and the Board recommended the same goal and timeline. The medical directors received a written notice from the Executive Director, but there was no mention of sanctions. The 12 facilities listed in the table below were placed on a quality improvement plan and had until October



31 to increase the percentage of patients utilizing a fistula by 3%.
Fistula Rates at 12 Intervention Facilities, by month

Dialysis Facilities	April Baseline	May	June	July	Aug	Sept	Oct	GOAL	MET GOAL
1	41.9	41.9	42.5	48.1	50.5	51.4	50.4	44.9	1
2	44.4	45.4	45.9	47.3	48.6	51.1	53.6	47.4	$\sqrt{}$
3	39.4	39.1	38.4	37.8	42.1	42.7	45.8	42.5	1
4	40.0	40.0	42.6	41.0	40.4	42.1	50.5	43.3	1
5	32.3	32.3	30.5	35.2	34.3	39.6	47.1	35.3	1
6	30.5	33.7	32.6	34.4	36.7	39.4	36.7	33.5	1
7	40.7	42.9	43.2	43.7	44.0	47.6	46.9	43.7	1
8	39.1	41.6	40.1	42.2	44.8	45.4	43.5	42.1	$\sqrt{}$
9	39.9	38.2	39.8	41.1	40.1	40.2	43.1	42.9	$\sqrt{}$
10	42.4	44.7	44.4	43.5	44.9	46.5	49	45.4	√
11	35.1	35.6	36.7	35.8	37.2	37.6	39.1	38.1	√
12	43.6	48.6	54.6	56.8	57.3	58.5	57.4	46.6	V

As you can see in the table above, 100% of the targeted facilities met or exceeded the 3% goal. Sustained improvement will be monitored for a minimum six months.

Focused Facility Monitoring- U.S. Virgin Islands

In 2009, Network Three identified a need for education concerning compliance with the Federal Conditions for Coverage at the facilities in the U.S. Virgin Islands. Based on this identified need, an action plan was developed in collaboration with the New York Regional office of CMS to address the specific needs of these facilities. At the request of CMS, and as directed by the Network 3 CMS Project Officer, the Network began to monitor patient safety and quality of care issues related to infection control, water treatment, equipment maintenance, patient assessment and plan of care. The facilities were required to provide the Network with ongoing data and records to address each specific area. Network QI staff reviewed this information and monitored implementation of recommended changes by the facilities to improve their outcomes. This project was extensive and involved ongoing communication between CMS, Network staff and facility leadership. Follow-up on these issues will continue into 2010.

B. Improve the independence, quality of life, and rehabilitation (to the extent possible) of individuals with ESRD through transplantation, use of self-care modalities, as medically appropriate, through the end of life.

Supportive Activities

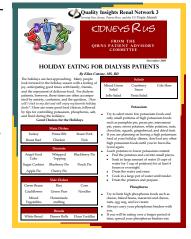
Network Three continues to promote independence, quality of life, and rehabilitation through various activities, as outlined. The Network has encouraged participation in vocational rehabilitation through the promotion and distribution of patient educational materials



through e-mails and mailings, during facility visits, patient education programs, newsletters, the Network Website and various provider meetings throughout the year.

Patient Newsletter

The Patient Advisory Committee (PAC) produced and distributed the *Kidneys R US* newsletter quarterly with assistance and contributions from the PAC members, dialysis providers and Network staff. The newsletters were translated into Spanish and distributed to all the Network facilities. Articles included: Dialysis Machines-Don't Be Alarmed, Emergency Room Insurance Claim Payments, Disaster Preparedness-Are You Ready?, Influenza Vaccinations, Home Dialysis Options, Holiday Diet Tips and Holiday Poems. Information about Network Three, the toll free number available to patients, and the Website address were included in every newsletter.



Website

The Network's Website (http://www.qirn3.org) provides information about Network Three, as well as educational and resource materials in English and Spanish. The Website was developed to serve patients and their families, dialysis and transplant providers, and the community at large. The Website includes information and the community at large.

- Patient/ Provider Conflict Management
- Dialysis Facility Compare
- Emergency/Disaster Preparedness
- End of Life
- Grievance Procedure
- Rights & Responsibilities
- Consumer/Provider Resources
- Local Help Groups
- Medical Issues
- Network Annual Report
- Network Events
- Patient Newsletters
- Quality Improvement
- Part D Drug Coverage
- Patient Advisory Committee
- Treatment Choices
- Vocational Rehabilitation



The Website has a "Search" feature that allows the viewer to search within the site itself. The site meets Section 508 Federal accessibility requirements and is updated with new

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content on a regular basis. The "Contact Us" feature allows the viewer to contact a Network Three staff member with questions or requests for additional information.

Vocational Rehabilitation

Network Three processed 131 calls from patients and providers during CY 2009 with questions concerning financial or reimbursement concerns, loss of benefits and requests for educational materials and resources. Patients received individualized vocational counseling on the benefits of exercise, transplantation, home dialysis options and training for home dialysis.

Facility social workers were given information to help their patients address rehabilitation concerns, apply for disability, Medicaid and/or Medicare, Social Security benefits, obtain medications and Medicare Part D, apply for secondary insurance, join patient support groups, financial assistance programs, and apply for the New Jersey Pharmaceutical Assistance to the Aged and Disabled Program (PAAD).

The Network promotes the participation of patients, providers of services and ESRD facilities in vocational rehabilitation. Facilities are required to post in a prominent place the Network poster describing treatment modalities, the Patient's Rights and Responsibilities, the Consumer Grievance Procedure and the patient complaint brochure titled *I Am a Dialysis Patient, What Can I Do If I Have a Complaint?*. Facilities are encouraged to provide treatment schedules that allow patients to work or refer patients to another facility with this ability.

Annually, at the Network education program, the Ahmet Ahmet Rehabilitation Award is presented to a dialysis patient who was nominated by his/her dialysis facility for exemplary behavior as an individual who through rehabilitation has overcome the many challenges of dialysis and best embodies the spirit of rehabilitation.

The Network provided several vocational rehabilitation educational programs during CY2009. They are listed below:

- April 7 and 14, 2009, the 19th Annual Transplant Designee programs were held in northern and southern New Jersey by the Network in collaboration with the Saint Barnabas Healthcare Kidney and Pancreas Transplant Program. The Network has over 300 certified transplant designees in New Jersey and over 100 in Puerto Rico and the U.S. Virgin Islands.
- May 13, 2009, the Home Designee program was held via a WebEx entitled the *The Comfort of Home, Home Dialysis Options*. The program was offered to all Network Three social workers and was attended by social workers from New Jersey, Puerto Rico and the U.S. Virgin Islands.
- May 19, 2009, Renal Support Network guest speaker Aaron Battle presented "Kidney Survivor: Lessons Learned from Experience," which focused on improved quality of life through the six steps to a longer and better quality of life on dialysis. Discussions included how to improve patient outcomes, decreasing hospitalizations, improving vascular access, the benefits of getting involved, networking and volunteering.
- October 1, 2009, the Network and the Saint Barnabas Healthcare Renal and



- Pancreas Transplant Program co-sponsored a patient education program on the benefits of transplantation.
- November 19, 2009, the first annual Quality Insights Renal Network Three meeting was held. Topics included: the Challenge of HRQOL Assessment for the ESRD Patient and Alternative Programs for Living Donation. The program was attended by over 300 physicians, patients, administrators, nurses, dietitians and social workers.
- Annually, the Network provides the social workers with the list of rehabilitation centers from the Division of Vocational Rehabilitation Services for New Jersey, Puerto Rico and the U.S. Virgin Islands.

C. Improve patient perception of care and experience of care and resolve patient complaints and grievances

Network Three worked consistently during CY2009 to ensure that all patients' complaints and grievances were investigated and resolved in a timely manner. The Network required each facility to post in a prominent place it's grievance policy and distribute annually paper copies provided by Network staff. Each facility must fully document all involuntary discharges and notify Network Three of each occurrence as required in the Conditions for Coverage.

Supportive Activities

The Consumer Grievance Procedure was distributed to all facilities in English and Spanish. Facilities were asked to display the material in a prominent place such as the waiting room, and distribute paper copies provided to all patients. In addition to paper copies, Network Three Consumer Grievance Procedure was posted on the Website in English and Spanish. When a new facility was approved by CMS as an ESRD provider, a package of materials was sent which contained the Consumer Grievance Procedure.

A patient educational brochure titled *I Am a Kidney Patient: What Can I Do If I Have a Complaint?* describes in basic terms the complaint process and how to contact Network Three. The brochure was translated into Spanish and distributed to all facilities in English and Spanish. All facilities were required to get patients' signatures verifying they received the brochures. The signature sheets were then faxed back to the Network as verification of the distribution. Facilities provided Network Three with signature sheets. Additionally, Network Three promoted an increase in beneficiary awareness of Network functions and responsibilities through patient education programs, the Patient Advisory Committee newsletter: (Kidneys R Us), and the What is Network Three? poster.



Evaluate and Resolve Patient Complaints and Grievances

Network Three may receive a written or oral complaint or grievance from a stage 5 chronic renal failure patient, patient representative, family member, friend, or others concerning either dialysis or transplant providers.

Referrals of ESRD consumer complaints or other concerns may be received from professional review organizations, state agencies, Medicare hotline numbers and Medicare intermediaries. When an oral grievance is received, the person taking the grievance will usually ask the consumer to document it in writing. During complaint or grievance investigations, consumers may designate representatives to act on their behalf. Immediate investigation is started for a potentially life-threatening issue. Network Three had no formal grievances in CY2009. The Network investigated fifty-five complaints in CY2009. Twenty-six were for treatment related/quality of care issues. Physical environment and staff related were the next most commonly cited reasons for complaints with nine and seven, respectively.

Consumers were encouraged to use facility internal processes prior to referring a complaint or grievance to Network Three because local problem solving can preclude escalation to a more serious level. When a patient did not wish to use the facility process (It is not mandatory that consumers use the facility grievance process.), they contacted Network Three for assistance.

The Network's responsibility for complaints/grievances is to review issues raised and determine the required action, i.e., investigation or referral. Consumers were asked to provide permission to Network staff to contact facilities for investigation of the complaint. Attempts were made to resolve complaints by acting as an investigator, facilitator, referral agent, or coordinator between a patient and the provider.

Quarterly, Network Three reviewed and analyzed contact information at internal quality improvement meetings. Data were evaluated for trends, interventions formulated and discussed with the Patient Advisory Committee and Boards, if indicated. Network Three noted a decrease in the number of calls in CY2009 for involuntary patient discharges as compared to CY 2008. Eight facilities made contact with Network Three when involuntary discharge was being considered. Seven of the contacts involved verbal threats or physical abuse. One case was for non-compliance. Three of the contacts resulted in patients being involuntarily discharged and admitted to other outpatient hemodialysis facilities. Five of the contacts were worked out with the patient remaining at the facility.

Network Three staff worked with facility leadership to avoid involuntary discharge and recommended the use of the Dialysis Patient Provider Conflict Resolution Tool Kit. Staff provided to all facilities a summary of the process that must be followed for an involuntary



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discharge. All facilities were encouraged to work with patients who are at risk for involuntary discharge to help modify their behavior, enabling them to remain in the facility. **Patient Advisory Committee**

The Patient Advisory Committee consists of patients from dialysis facilities in Network Three's area and represents all modalities. Members have a genuine concern for quality of care issues. The committee serves as a link between patients and the Network, encourages patients to be involved in their health care, share skills, knowledge and experience.

The committee supported Network Three's mission to improve the quality of care provided to patients and represented the entire patient population. The committee provided consumer advice to the Medical Review Board and the Board of Directors. The members were involved in creating the patient newsletter, Kidneys R Us, and assisted with the development and promotion of educational materials and resources for patients.

In 2009, the committee developed, reviewed and organized the content for the newsletter, which was distributed in April, June, September and December. The newsletters were translated into Spanish and distributed to all the Network facilities. Content included: Dialysis Machines-Don't Be Alarmed, Emergency Room Insurance Claim Payments, Disaster Preparedness-Are You Ready?, Influenza Vaccinations, Home Dialysis Options, Holiday Diet Tips and Holiday Poems. Information about Network Three, the patient's toll free number and the Website were included in every newsletter.

The committee collaborated with the New Jersey Renal Coalition to review and determine patient educational handouts and materials for the patient education programs that were held on May 19 and October 1, 2009. Meeting topics included "Understanding the Dialysis Machine" and "Kidney Transplant."

The Patient Advisory Committee added new members who are acting as Patient Representatives from their facilities. These patients attend the meetings by conference call or in person when possible. Their role is to participate on the committee with the same responsibilities as the PAC members without the expectation they will attend meetings in person. Forty-five new Patient Representatives have joined the committee. Meetings were held quarterly at a location in central New Jersey. Conference calling was utilized during each meeting.



D. Improve collaboration with providers and facilities to ensure achievement of goals A through C through the most efficient and effective means possible, with recognition of the differences among providers and associated possibilities/capabilities.

Establish and Improve Partnerships and Cooperative Activities

CMS encourages Networks to establish and enhance partnerships with other health agencies and groups. The Network collaborated with CMS regional offices, state survey agencies, New Jersey and Puerto Rico Departments of Health, quality improvement organizations, the New Jersey Renal Administrators Association, American Nephrology Nurses Association (ANNA), Council of Nephrology Social Workers, and interested agencies to improve the quality of care provided to consumers.

State Survey and Certification Agencies

The Network collaborated with the state survey agencies in New Jersey and Puerto Rico. Health and safety problems and complaints were referred to the appropriate state agency for investigation and resolution. Network Three held quarterly telephone conferences with state surveyors in New Jersey, Puerto Rico and the New York Regional Offices for the Virgin Islands.

The Network collaborated with the State surveyors to establish a communication process to provide State surveyors with clinical data utilized during routine or re-certification surveys. A tool was developed and is completed by Network staff prior to a scheduled state or federal survey. The tool includes vascular access data, clinical performance measures and related quality improvement plans. The Network reports facility specific complaints and grievances and involuntary discharges. The data sharing supports focused intervention by the State surveyors and has resulted in improved outcomes due to collaborative efforts by the Network and state survey agency.

The Network Council

For decades Network Three held the Annual Renal Council Meeting and sought the input of providers, consumers and renal professionals attending the meeting. In an effort to increase communication and collaboration with providers and consumers, the Network Council was reorganized in 2009. Recognizing the differences between New Jersey and Puerto Rico and the U.S. Virgin Islands, the Network created two council branches, one for New Jersey and one for the Island territories. Volunteers were sought via email and during meetings, and the first New Jersey conference call was held on December 15, 2009, with 21 attendees, including one patient from the PAC committee.



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The members reviewed the Network Council history, the mission statement and the evaluations and feedback reports from the 2009 Annual Educational Program held on November 19, 2009. The Council members considered topics for the 2010 Annual Educational Program and indicated their top three choices. Future agenda items will include review of the National Elab Clinical Performance Measures, network performance improvement activities related to Elab data, and questions to be addressed by the State Survey Agencies.

The Puerto Rico and U.S. Virgin Island Network Council call will be held in first quarter 2010.

New Jersey Renal Coalition

In March 2005, CMS introduced the Strategic Partnership for Change initiative to ESRD Networks. The goal of the program was to ensure optimum quality of care along the continuum of Chronic Kidney Disease (CKD/ESRD) and End Stage Renal Disease by using coalition and partnership building as strategic tools. The coalition structure and mission were introduced to the Network's renal community.

The New Jersey Renal Coalition (NJRC) mission states it will provide a multifaceted approach to improve patient education and professional clinical practice patterns for the pre ESRD and prevalent dialysis patients. Members included nursing administrators, insurance carriers, the New Jersey Department of Health, New Jersey Healthcare Quality Strategies Organization, American Nephrology Nurses Association, American Dietetic Association, patients, a nephrologist, nurses, social workers, dietitians, PharmDs, transplant coordinators, New Jersey Hospital Association, social workers, the Renal Support Network and other interested groups. The coalition meets at least quarterly in person and or by conference call if members are unable to attend in person. The New Jersey Renal Coalition has a Website at: http://njrenalcoalition.com.

Since 2006 the coalition has distributed the quarterly vascular access medical director report cards to all dialysis facilities in New Jersey. The quarterly report ranked the facility within the state by prevalent fistula and catheter rates. The report also included the percentage of incident patients starting dialysis with a catheter or functioning fistula.

In 2009 the NJRC collaborated with the Patient Advisory Committee (PAC), the Renal Support Network, Saint Barnabas Kidney and Pancreas Transplant Program, Morristown Memorial Hospital, and Helene Fuld Medical Center to develop educational programs for patients and professionals. The following programs were sponsored by the Coalition:

- May 19, 2009, the Renal Support Network provided guest speaker Aaron Battle for the patient education program, *Kidney Survivor: Lessons Learned from Experience* held at the Capital Heath System, Fuld Campus in Trenton, New Jersey.
- The October 1, 2009, NJRC co-sponsored a patient education program on trans-



- plantation and home dialysis modalities with the Saint Barnabas Kidney and Pancreas Transplant Program held in Livingston, New Jersey.
- September 26, 2009, a professional educational program, *New Trends for Early Treatment of Chronic Kidney Disease* was presented by volunteer nephrologists for attending physicians, resident physicians, physician's assistants and nurses at Morristown Memorial Hospital in Morristown, New Jersey.

Emergency/Disaster Preparedness and Response

In 2009, the Network continued to enhance the Patient and Provider Continuity and Continuity Plan, a Network-specific plan that outlines it's responsibilities related to emergency and disaster preparedness and response.

Contents included information for New Jersey, Puerto Rico and the U.S. Virgin Islands:

- Network Three's emergency disaster preparedness and response policy;
- Universal codes for Networks; Emergency Network staff contacts;
- Facility contacts by state, county and affiliation (large dialysis organization, hospital based or independent);
- Emergency state contacts; New Jersey, Puerto Rico, U.S. Virgin Islands utility contacts; New Jersey/Pennsylvania generator retail locations;
- List of patients by zip codes and age group; and list of Network executive directors; and
- Back-up agreement with Network 13.

Network staff participated in the national Kidney Community Emergency Response Coalition (KCER) and participated on the New Jersey Special Needs Advisory Panel (SNAP).

The Network was involved in the KCER Pandemic Calls that addressed the outbreak of the H1N1 influenza virus in the United States. Information regarding the impact on the renal community in Network Three was communicated to all attendees. Network staff educated the dialysis staff about the CDC regulations for out-patient dialysis centers. Ongoing communication continued and additional educational material was forwarded to facilities throughout all stages of this outbreak. The Network provided all facilities with information regarding the process established by the New Jersey Department of Health and Senior Services (NJDHSS) to register as a provider of the vaccine when it became available in October.

Network staff attended two day-long New Jersey Department of Health H1N1 Summits on August 21 and September 29. The summits included members of state agencies, county OEM and health departments, business leaders, health care representatives and private non-profit groups. The Network addressed the needs of the renal community to ensure it was considered during the planning phases for distribution of the vaccine by the NJDHSS. Relevant information received was communicated to the dialysis and transplant facilities.

The Network obtained information from dialysis facilities regarding the planned distri-



bution of the vaccine. The staff educated the facilities regarding the need to track all patients receipt or refusal of the H1N1 vaccine.

The Network developed a facility Emergency Contact List that was required to be completed and posted in all facilities. This list is a concise telephone reference that is available to all staff to utilize in the event of an emergency. The list is posted on the Network Website for staff to access as needed. It was forwarded to all administrators via email with instructions to complete and post in the nursing station.

Network Three presented on the needs of the renal population at the New Jersey Emergency Preparedness Conference on May 7, 2009. The presentation educated emergency responders about the renal community and how it is impacted during local or regional disasters. This was an opportunity to reach a group of emergency responders who may not otherwise understand the needs of the renal patient or the dialysis facility in their response area.

Network staff developed a webinar for facility administrators and disaster coordinators concerning disaster planning. This webinar was conducted on October 28, 2009, and had 72 attendees. The Power Point presentation was also emailed to all facility administrators and disaster coordinators in the Network. Ongoing education regarding the Conditions for Coverage and the emergency preparedness conditions was provided.

Professional Organizations

The Network participated in planning the transplant designee conferences held in two locations in New Jersey. The program was developed in collaboration with the Saint Barnabas Kidney and Pancreas Transplant Program and held on April 7 and April 14, 2009.

The Network collaborated with the Auxilio Mutuo Transplant Center and the Organ Procurement Organization, Life Link Foundation in San Juan, Puerto Rico to provide the Transplant Designee Program in spring 2010 in Aguadilla, Puerto Rico.

The Network conducted activities with the American Nephrology Nurses Association (ANNA) both nationally and with local chapters. ANNA provides the contact hours for the Network Annual Education Program. Network staff are scheduled to present at two ANNA educational programs in Atlantic City and Spring Lake, New Jersey, in spring 2010.

The Network was asked to speak at three NJ Vascular Access programs provided by a local vendor. The topics included Vascular Access Assessment and the Conditions for Coverage. Slides developed by Network 5 were utilized and the meetings were held on September 24, October 1 and 8, 2009. ANNA contact hours were awarded to participants.



The meetings were held in North, South and Central New Jersey and were attended by over 100 nurses and dialysis technicians.

Annual Network Education Program

On November 19, 2009, the Network held the first Quality Insights Renal Network Three (Network Three) Annual Education Program. Approximately 350 dietitians, social workers, physicians, nurses and patients attended the meeting. Guest speakers included Dr. Frederic Finkelstein who discussed the Challenge of Health Related Quality Of Life Assessment for the ESRD Patient and later in the day spoke on the Role of Peritoneal Dialysis in the Management of CKD Patients. Dr. Michael Germaine presented Hospice/Palliative Care for the ESRD Patient and Dr. Joseph Tricarico from the NJDOHSS provided an update on New Jersey H1N1. Dr. Anup Patel discussed Alternative Programs for Living Donation, and Dr. Toros Kapoian, BOD Vice-Chair, presented Clinical Outcomes and Network Initiatives.

Presentation of the Ahmet B. Ahmet Rehabilitation Award to a consumer, elected by the Boards from the many deserving nominations submitted by facility staff, was a meeting highlight.

Facility staff were invited to highlight specific internal quality projects for the benefit of all meeting participants. Ten posters were displayed at the 2009 annual meeting:

Booker Outpatient Dialysis

Arteriovenous "Fistula first" Initiative, The First Choice for Hemodialysis Vimla Christian, RN, CNN

DCI North Brunswick

The Pandemic Influenza

Neeta O'Mara, Pharm D, Lisa Bross Gajary, RN

DCI North Brunswick

The Hemodialysis Game

Lisa Bross Gajary, RN

FMC Whiting

HD Fistula 1st Initiative (AVF) Catheter Facts/Hazards

Kathleen Schaffer, MSW, LSW; Alex Rosenblum, BS, RN, CNN

FMC Harrison

Learning Styles of Hemodialysis Patients and Dietary PO4 and Binder Adherence

Deena Natale, MS, RD

Morristown Memorial Hospital

Use of Tego Connectors in Hemodailysis Access: A Cost-containment Project Nina Ignacio, RN, BSN, CNN; Kathleen Vnenchak, BSN, RN, CNN; Phoebe Aliparo,



BSN, RN, CNN; Madeline McLoughlin, BSN, RN, CNN; Mary Buckley O'Dell, RN, MBA, CNN
Our Lady of Lourdes Medical Center
Buttonhole Technique
Emma Sosa, RN

Our Lady of Lourdes Medical Center **Water Treatment** Maureen Vassie, RN, CDN

Our Lady of Lourdes Medical Center **Access Complications**Marcy Kopytko, RN

Renal Ventures Management, LLC **Take the Renal Ventures Management E-Train to Certification**Nancy Foley, RN, CNN; Karen Marcus, BS, RN, CNN

Registrants were asked to complete an evaluation of the event and to evaluate the effectiveness of Network activities over the last 12 months. The Network received a weighted 8.1 effectiveness score on a scale of 1-10. The participants were asked to select areas in which the Network could improve; staff education, patient education and quality improvement received 37%, 27%, and 13% of the responses, respectively. In response to this evaluation, the Network scheduled quarterly provider and patient education programs in 2010.

E. 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.

Supportive Activities

The goal of improving standardization of information management within QIRN3 consists of several measures.

SIMS

SIMS is an integrated system that provides communication and data-exchange links among the Networks, facilities, and CMS. Each Network has a local database where patient, facility, and facility personnel data are entered and maintained. Through an automated data transfer application, the SIMS database was replicated to the central repository on a nightly basis. Replication was checked daily to assure that the process occurred



successfully. The replication process was monitored, performed reliably on a daily basis and was documented on a quarterly basis in Network Three's logs.

SIMS has the capability to produce various reports used by facilities to ensure facility-reporting accuracy. In particular, the annual CMS-2744 form was completed, and used to validate patient activity throughout the year. The validated data is patient-specific and provides elements such as age, race, sex, ethnicity, diagnosis and modality/setting of care, as well as patients' county and state of residence. This information was used to reconcile Network Three's database.

SIMS was also used for receiving and processing notifications from CMS. Notifications are records in which particular elements, such as patient date of birth, date of death, first name, HIC number, most recent transplant date, most recent transplant failure date, sex, social security number, or surname are found to be different than what is on file with the Social Security Administration. Network Three sent these records to the appropriate facility once each month, where the facility verified the data, and returned to the Network office the correct information.

All data discrepancies were reviewed for validity and accuracy through notifications, and discrepancies were resolved within the SIMS database. This process was run on a monthly basis. Data clean-up activities were also run on a monthly basis; utility logs showed resolved queries and any that needed to be addressed.

To accomplish accurate and timely data reporting, all facilities notified Network Three of all patient status changes on a monthly basis. Any changes in the dialysis caseload were noted, including:

- Newly-diagnosed consumers who started a regular course of dialysis;
- Changes in modality during the month (e.g., hemodialysis to CAPD);
- Changes in setting during the month (e.g., facility patient who started home dialysis);
- Transfers into or out of the facility during the month;
- Returns to dialysis after renal transplant grafts failed;
- Restarts to dialysis after temporarily regaining kidney function;
- Patient deaths:
- Discontinuation of dialysis treatment;
- Patients who became lost to follow-up; and
- Patients who regained native kidney function to the extent that dialysis was stopped.

Data Reconciliation

Input forms employed to maintain Network Three's patient-specific data system included:

- Monthly Caseload Changes/Census form
- End Stage Renal Disease Medical Evidence Report: Medicare Entitlement and /or



Patient Registration (CMS-2728)

ESRD Death Notification form (CMS-2746)

Methods used to check and reconcile data that were submitted as required, included:

- ESRD Facility Survey (CMS-2744)
- Accretions lists from CMS
- Notifications from CMS
- Federal REMIS Website

Network Three staff validated and monitored the accuracy and timeliness of data submissions from all dialysis and transplant programs in New Jersey, Puerto Rico and the Virgin Islands. Facility compliance was monitored for each of the federal medical information system forms listed. Semiannually, the data file was run through customized programming. Two aspects of facility feedback were generated for each of the required forms:

- Compliance rate summary report
- Detail of each form submitted

The compliance rate summary report presented calculations of the total number of forms transmitted, the number of forms submitted that were within the 30 or 45 day goal, the number of forms with errors and the percent compliance by each facility. The detailed report generated patient-specific information on each form.

Forms compliance reports were distributed to facility administrators with the request that they positively recognize those employees who achieved the reporting goal of submitting forms within 30 or 45 days of events. Alternately, if the compliance reports reflected forms that were overdue and outstanding, administrators were expected to follow-up with their employees to correct factors that affected non-compliance.

CMS Notifications

CMS notifications are requests for patient database validity information. Each month notifications were sent to those facilities where discrepancies were noted by CMS. Facilities then reviewed the element in question and either reported the value as correct or provided the corrected data element. The corrected/validated information was entered in the SIMS database, which ensured accurate data in the national database and REMIS.

End Stage Renal Disease Medical Evidence Report: Medicare Entitlement and /or Patient Registration (CMS-2728)

End Stage Renal Disease Medical Evidence Report: Medicare Entitlement and /or Patient Registration (CMS-2728) is the initial reporting form for all persons with end-stage renal failure who began a regular course of dialysis or had a renal transplant as a first form of therapy. The form was completed and submitted to Network Three by facilities and veterans' administration hospitals according to federal regulations. Submission is expected within 45 days of the start of renal replacement therapy whether or not the patient applied at that time for financial coverage under the federal Medicare program.



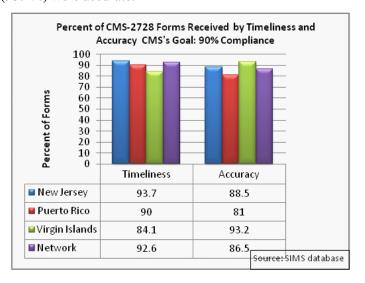
Network Three staff entered data from the forms into computer software supported by the federal government. If data required on the form were missing or incompatible with CMS software, the form was rejected by the software and returned to the facility for correction.

Network Three's dialysis facilities submitted 5,057 initial forms during the year; of these, 4,684 (92.6%) were on time, and 4,372 (86.5%) were accurate.

New Jersey facilities submitted 3,615 forms, of which 3,199 (88.5%) were completed accurately, and 3,389 (93.7%) met CMS's timeliness criterion.

Facilities in Puerto Rico submitted 1,398 forms, of which 1,258 (90.0%) were on time, and 1,132 (81.0%) were completed accurately.

Forty-four forms were received from the U.S. Virgin Islands, of which 37 (84.1%) were on time, and 41 (93.2%) were accurate.



ESRD Death Notification form (CMS-2746)

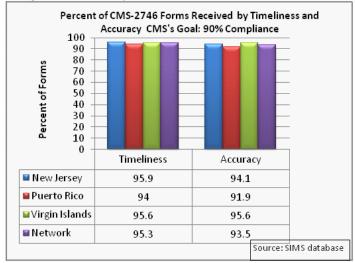
The ESRD Death Notification form is due within 30 days of a patient's death. Network Three's facilities submitted 3,729 death notification forms during the year, of which 3,555 (95.3%) were on time, and 3,486 (93.5%) were accurate.

New Jersey dialysis units submitted 2,576 death notification forms during the year, of which 2,470 (95.9%) were on time, and 2,425 (94.1%) were accurate. New Jersey exceeded both the accuracy and timeliness requirements.

Puerto Rico's dialysis programs submitted 1,108 death notification forms, of which 1,042 (94%) were on time, and 1,018 forms (91.9%) were completed accurately. Puerto Rico exceeded the goal for accuracy and timeliness.



The three Virgin Island facilities submitted 45 death forms, of which 43 (95.6%) were received on time, and 43 forms (95.6%) were completed accurately. Virgin Islands facilities exceeded the goal for accuracy and timeliness.



In addition to receiving, processing, and transmitting data reported on the federal medical information system forms, Network Three maintained a patient tracking system (SIMS) that tracked end-stage renal disease consumers through changes in treatment modality and setting. Changes in provider were also tracked. These activities were necessary to support federal quality projects and special studies. Monitoring patient events was also necessary for the reconciliation of the annual federal ESRD Facility Survey, preparation of facility profiles for goal achievement in home dialysis use and referral, and local quality of care improvement efforts.

Data accuracy and forms timeliness were reviewed biannually and documented. Both federal forms were profiled for compliance rate analysis.

UNOS

Renal transplant registrations and follow-ups were resolved through updates and verifications within the SIMS and UNOS databases. Data were received monthly from UNOS and entered into the SIMS database. Discrepancies were reviewed with transplant facilities, and accurate reconciliation of patients was obtained through the SIMS report sum-



mary.

CMS requires that patient and physician signatures on 3% of all CMS-2728 (Medical Evidence Reports) forms submitted through VISION be verified annually. Network Three received 1,495 CMS-2728 forms through VISION, and thus, were required to verify 45 forms; 52 forms were randomly requested and received from 34 facilities, all of which were signed by the physician. Patient signatures were verified on 51 forms, and after investigation, it was found that the remaining form was for a patient who had expired before signing the form.

REMIS

The federal REMIS system is an important component of the CROWN system and is based on federal billing records. Data entered into SIMS by Network Three staff can be viewed there, as can data sent from sources such as CMS, the Social Security Administration, and UNOS. The data can be used to resolve discrepancies and complete patient event histories.

Network staff used the Alerts tool in REMIS to identify incorrect patient identifiers and maintain a more accurate data set. Out-of-area transfers were verified in this database.

Effectiveness

All tracking databases must have current, accurate information, and facility cooperation is essential to this effort.

Network Three continued to support VISION software by training facility staff in existing facilities when assigned staff changed. No new VISION facilities were trained in 2009.

Consumer Impact

An accurate database is essential for the analysis of clinical indicators. Performance analysis activities utilize current, reliable data to monitor clinical patient outcomes. Network Three's efforts to improve data accuracy enhanced data reliability and assured appropriate facility review with improvement plan oversight.

Accurate and timely reporting of patient data is essential for determining the starting date of Medicare coverage. Network Three continued to maintain a database high in accuracy and timeliness.



IV. SANCTION RECOMMENDATIONS

No recommendations for sanctions were made in 2009.



V. RECOMMENDATIONS FOR ADDITIONAL FACILITIES

In all three geographic areas, access to dialysis therapies is within reasonable travel distances from ESRD consumers' homes. No additional New Jersey, Puerto Rico, or Virgin Islands dialysis facilities were recommended.

