



Trans-Atlantic Renal Council

2006 Annual Report

ESRD Network 3
Contract Number: 500-03-NW03

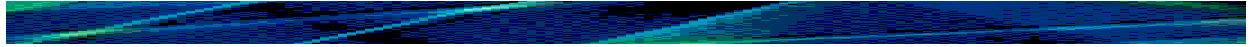
Submitted to:

Kathleen Egan, Project Officer
CMS/Division of HSQ
Boston, MA

Submitted by:

Trans-Atlantic Renal Council
109 South Main Street, Suite 21
Cranbury, NJ

June 30, 2007
August 13, 2007
August 23, 2007
August 29, 2007



I. Preface

I am pleased to submit this annual report of performance and achievement on behalf of all ambulatory renal care facilities in New Jersey, Puerto Rico and the Virgin Islands.

Fistula rates have improved significantly although more needs to be accomplished to attain the 2009 goal of 66% in prevalent patients. Several facilities already have exceeded this national goal. The New Jersey Renal Coalition will assist through outreach and education with primary care practitioners and patients in the early stages of chronic kidney disease so that fistulas are placed before dialysis is imminent.

The number of catheters in use for longer periods of time will continue to be addressed. This effort parallels the activities aimed at increasing the number of fistulas in use, preferably inserted before the initiation of treatment.

Efforts were directed to increasing the number of home care patients and the number who chose this modality continued to decline slightly as is seen nationally.

The expected levels of treatment adequacy and anemia management are being maintained in the majority of cases as well as transplant referrals.

The newly reconstituted patient advisory committee provided consumer perspective to projects and activities, especially in patient education, that contributed to goal attainment.

Finally, I would like to express our appreciation to network staff that coordinate and support all the administrative work we perform.

We look forward to the continuation of this partnership with the Centers for Medicare & Medicaid Services, facility staff, consumers, departments of health and other interested agencies as we begin another phase of health care quality improvement projects.

Toros Kapoian, MD
President, Board of Trustees

June 30, 2007

Table Of Contents

I. Preface	ii
II. Introduction	1
A. Network Description.....	1
B. Network Structure.....	10
1) Staffing.....	10
2) Names And Titles Of Staff.....	10
3) Key Responsibilities.....	10
4) Committees	12
5) Functional Description	13
III. CMS National Goals And Network Activities	20
A. Improve the quality and safety of dialysis related services provided for individuals with ESRD;.....	20
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	32
C. Improve patient perception of care and experience of care and resolve patient complaints and grievances; and,	38
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 the associated possibilities/capabilities.	46
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.	49
IV. Sanction Recommendations	54
V. Recommendations For Additional Facilities.....	55
VI. Data Tables	56
VII. Appendix: Data Management.....	117

Tables And Graphs

Map of New Jersey	1
Number of New Jersey ESRD Facilities Network 3	3
Setting Distribution of New Jersey Dialysis Cases	3
Renal Transplants Performed in New Jersey by Type	5
Map of Puerto Rico	5
Map of U.S. Virgin Islands.....	6
Population of the U.S. Virgin Islands – 1990 & 2000.....	6
U.S.V.I. Population by Age.....	7
Setting Distribution of Virgin Islands Dialysis Cases	8
Setting Distribution of Puerto Rico Dialysis Cases	8
Renal Transplants Performed in Puerto Rico by Type	9
Trans-Atlantic Renal Council Staffing Structure	12
Average % Fistula Improvement Post Intervention.....	21
Average % Catheter Reduction Post Intervention	22
% Decrease in Catheters >90 Days.....	23
Vascular Access Type in Use in Network 3 by % of Patients	23
Vascular Access Type in Use in New Jersey by % of Patients	24
Vascular Access Type in Use in Puerto Rico by % of Patients	24
Vascular Access Type in Use in Virgin Islands by % of Patients.....	25
Number of Clinical Performance Measures Participants	26
Percent of Hemodialysis Patients with Urea Reduction Ratios \geq 65%	26
Percent of Hemodialysis Patients with Hemoglobin Values \geq 11 gm/dL	27
Percent of Hemodialysis Patients with Albumin Values >4.0 Gm/dL.....	28
Percent of Prevalent Hemodialysis Patients with a Fistula Access	29
Percent of Prevalent Hemodialysis Patients with a Catheter Access.....	29
National CPM Peritoneal Dialysis Adequacy Results	29
Percent of Adult Peritoneal Dialysis Patients with Treatment Adequacy Measurements.....	30
Progress Toward Meeting CMS/TARC Goals.....	31
Percent of Home Patients by year in Network 3	34
Effectiveness of Site Visits	37

Patient Complaints/Grievances Category Distribution.....39

Patient Complaints and Contacts, 2005 and 200640

TARC Web Visits41

Anemia Quality Assessment Improvement Project.....43

% Non-tunneled and Subclavian Catheters44

Percent of CMS-2728 Forms Received by Timeliness and Accuracy51

Percent of CMS-2746 Forms Received by Timeliness and Accuracy52

DATA TABLE 1: ESRD Incidence.....57

DATA TABLE 2: ESRD Dialysis Prevalence.....59

DATA TABLE 3: Dialysis Modality: Self-Care Settings - Home61

DATA TABLE 4: Dialysis Modality: In-Center66

DATA TABLE 5: Renal Transplants: Number Performed and Patients Waiting.....71

DATA TABLE 6: Renal Transplants: by Type, Age, Race, Sex, and Primary Diagnosis72

DATA TABLE 7: Dialysis Deaths74

DATA TABLE 8: Vocational Rehabilitation76

Facility Codes (for use in reading graphs)83

Transplant Activity Profile.....85

Goal Achievement in Home Dialysis.....87

Home Dialysis Goal Activity Profile.....97

Goal Achievement in Federal Forms Submission: Medical Evidence Reports.....99

Goal Achievement in Federal Forms Submission: Death Notices108

II. Introduction

A. Network 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. Although New Jersey is geographically one of the smallest states in the nation (it ranks 46th), it is the ninth most populous, with approximately 8.7 million residents. There are 1,172.8 inhabitants per square mile of land area - the most densely populated state in the nation.¹ The population is expected to increase 24% by 2030.

The majority of residents reside in metropolitan areas, with only 10.6% in rural areas. The U.S. Census Bureau categorized only New Jersey and the District of Columbia as 100% metropolitan areas. The only area to surpass New Jersey in degree of urbanization is California (92.6%), where there is the largest resident state population (35.4 million). However, California has a population density of only 227.5/sq. mi.

Not all age groups are equally constituted. The under-5 age group constitutes 6.7% of the resident population; the 5-17 age group accounts for 18% of the population; the 18-24 group for 8.5%, the 25-44 age group for 28.9%, the 45-54 for 14.7%, the 55 to 64 group for 10.1% and the 65+ group for 13% of the population. It is important to note that from 1990 to 1998, the 85 and older age group increased by 38%. This growth in the aged population among the residents of New Jersey contributes to the increase in the mean age of consumers presenting for renal therapy due to end-stage disease.

The population is reported to be 77% white, 14.5% black, 6.5% Asian and 2% 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 decent comprise more than 33% of all Hispanic residents. The largest increase of New Jersey's Hispanic residents occurred in Hudson and Passaic counties.

New Jersey is surpassed by only 6 other states in the proportion of resident Hispanic or Latino residents; California (34.3%), Texas (33.6%), Arizona (27.7%), Florida (18.6%), Illinois (13.6%) and New York (16.3%) surpass New Jersey's 13.3% resident Hispanics and Latinos.

For the year 2003, New Jersey remained fifth in the number of immigrants admitted from other countries and was surpassed only by the states of California, Florida, New York and Texas. The US Census Bureau reported the admission to New Jersey of 40,699 immigrants from other countries, with 7,442 from



¹ All demographic data are taken from the *Statistical Abstract of the United States:2006-125 ed.*, US Census Bureau, Washington, DC, 2005 unless otherwise noted.

India, 3,956 from the Dominican Republic, 2,639 from the Philippines, 1,922 from Columbia, 1,686 from China, 631 from El Salvador and 431 from Vietnam. Foreign-born residents account for 17.5% of the state's population, exceeded only by California (26.2%) and New York (20.4%).

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.

In 1998, the latest available census data showed New Jersey per-capita personal health-care expenditures (\$2,900/resident) were exceeded only by the states of Connecticut (\$3,298), New York (\$3,255), Pennsylvania (\$2,941) and Rhode Island (\$2,937). The major portion was spent on hospital services followed by physician services, drugs and non-durables, nursing home care, other professional services, dental services, home health care, other personal health care and medical durables.

Health insurance coverage in 2003 did not extend to 14% of the New Jersey population; the national average in 2003 was 11.4% and 14.0% in 2000. Children not covered in New Jersey in 2002 constituted 9.7%, and 9.3% in 2000; the national average was 11.6% in that same year.

The New Jersey population estimated to be below the poverty level was 8.4% while the national rate was 12.7%; four states had lower rates than New Jersey's. In 1980, 9.0% of New Jersey's population was reported to be below the poverty level while the national rate was 13.0%.

INCIDENCE OF RENAL DISEASE IN NEW JERSEY

In 2004, all states had an adjusted end-stage renal disease incidence rate that exceeded 204 per million population². The *2005 Annual Data Report* of the United States Renal Data System (USRDS) listed thirteen states with higher age-race-sex-adjusted incidence rates than New Jersey's compared to ten states in 2001. The New Jersey adjusted incidence rate in 2004 was reported to be 349/million (351/million in 2003).

According to the 2006 ESRD Facility Survey, 3,426 people initiated therapy compared to 3,401 in 2005, and 3,251 in 2004. 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 2006, 58% were 65 years or older, and 46% were 70 years or older. Eighteen percent were 80 years or older.

Other characteristics of the New Jersey incident population closely mirror national new case renal statistics: 55% were male and 45% female; 31% black and 61% white.

Among incident cases, the most frequently reported primary diagnoses were diabetes (43%) and hypertension (27%). Collectively, these two diagnoses represented the largest proportion of new cases in 2006.

RENAL THERAPY IN NEW JERSEY

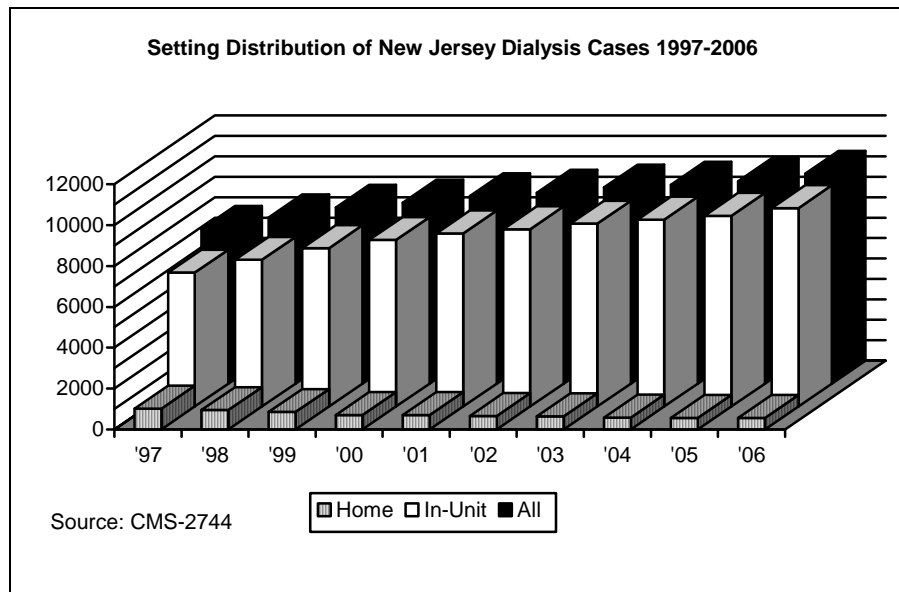
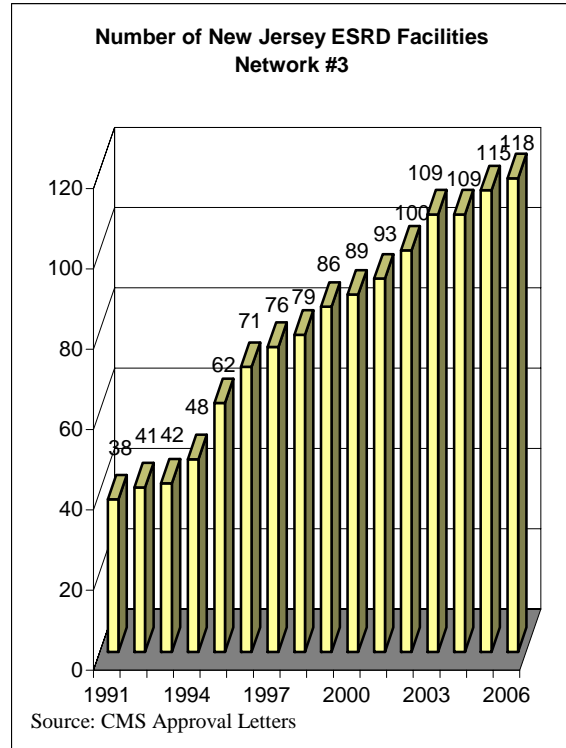
The New Jersey Department of Health regulated the approval of all new ESRD providers and expansion of services through the certificate-of-need process until January 1992. Since that time, chronic ambulatory dialysis was no longer subject to certificate-of-need requirements. The number of facilities increased from 38 in 1991 to 118 (not including a non-Medicare certified ESRD veterans' hospital) in 2006.

² Source: US Renal Data System, USRDS 2006 *Annual Data Report*, vol 11, NIH, NIDDK, Bethesda, Md, 2006

In 2006, the total approved station count rose to 2,133 in 118 Medicare-certified facilities. Most facilities are no longer hospital-based since 84 freestanding clinics and 8 hospital satellite facilities provide service. There were 26 hospital-based facilities and one veteran's administration hospital, which is not a participant in the Medicare program.

Almost all facilities were approved to provide staff-assisted hemodialysis except for 2 peritoneal dialysis-only units. Of the facilities offering home dialysis 63% offered CAPD/CCPD training; 17% offered hemodialysis home training. These services reflect the choices among patient and physician preferences for therapy and were available throughout the state.

Staff-assisted hemodialysis, favored by 94% of ESRD consumers (83% in 1996), remained the dominant therapy in the state. Continuous cycling peritoneal dialysis (CCPD) became the dominant home therapy (n=368), with continuous ambulatory peritoneal dialysis (CAPD) the second most prevalent (n=171). Home hemodialysis accounted for only 30 cases statewide in 2006.



PREVALENCE

The USRDS published adjusted annual point prevalence rates/million population for 1995-2004 by state. New Jersey results were 1117, 1165, 1214, 1271, 1336, 1369, 1399, 1429, 1461 and 1488, respectively.

The 2006 New Jersey prevalent caseload increased 3% over the prior year. Of the approximately 10,300 prevalent consumers receiving dialysis in New Jersey, 56% were male and 44% female. Forty-one percent of the population on dialysis was black, 51% white, with other racial groups constituting the remainder.

Thirty-seven percent of the consumers receiving chronic dialysis in New Jersey during 2006 were seventy years or older; 59% were aged sixty years or older. The aged population continues to be the fastest growing segment both receiving long-term chronic care and initiating treatment.

Diabetes was the most frequently reported primary disease of all prevalent consumers on dialysis at 40%. Hypertension followed at 30% of the caseload and "other" ranked third at 12%. The majority of consumers (70%) in treatment were diagnosed with either diabetic nephropathy or hypertensive disease—the two leading national risk factors for ESRD.

The mean age of the prevalent patient population in 1980 was 49.6, in 1990 it was 53.4, in 2000 56.9 and in 2004 it was 57.8 showing a steady progression toward an older population.

MORTALITY DATA

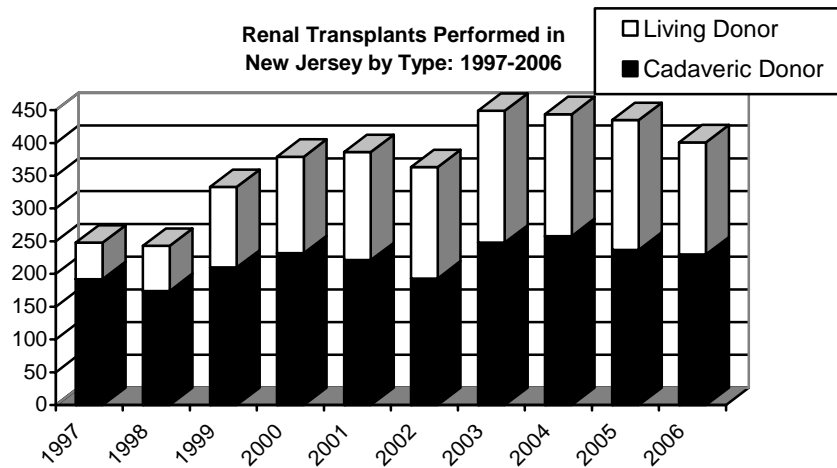
Death notification reports for New Jersey ESRD consumers were analyzed by sex, race, and cause of death. The primary cause of death reported in 2006 continued to be cardiac (46%), which again reflected national data. Infection was reported as primary cause in 19% of the 2689 death records received. Of all deaths reported in 2006, 64% were white, 32% black; 54% were male, 46% female. Primary diagnoses among deaths reported were diabetes (44%), hypertension (32%), glomerulonephritis (7%), polycystic disease (1%), and other/unknown.

TRANSPLANTATION

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 2006, 401 transplants were performed in New Jersey at federally certified ESRD renal transplant centers, an 8% decrease from 2005 total of 435 transplants. Of the 401 transplant procedures performed within New Jersey, 230 had cadaveric donors and 171 had living donors.

The number of consumers on a waiting list in New Jersey continued to increase to a total of 2,714. 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.



Source: SIMS. CMS-2744. UNOS

Puerto Rico and the Virgin Islands

Geography and General Population Characteristics

Puerto Rico

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 2004 population of 3.894 million³. There were 1,027.9 inhabitants per square mile according to the 2000 census. Between 1990 and 2000, the population increased 8%.



The area has commonwealth status to the United States and is an unincorporated territory. Status relationship to the United States is under discussion with the US Congress and among island residents. The main island 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. Sediment buildup (60% storage reduction over the last 50 years) in reservoirs reduced the holding capacity of several major water supplies. Reclamation efforts are underway and should reduce the periodic threat to potable water supplies. The U.S. Geological Survey

³ Source: *Statistical Abstract of the United States: 2006-2007*, US Census Bureau, US Dept of Commerce, 2006, 2007

works with 15 local agencies to operate a real-time hazard alert network concerned with rainfall, stream flow, lake levels and beach erosion from catastrophic events⁴.

The island is rich in culture from the various settlers throughout its history. The primary influence is Spanish although the Taino culture predated Spanish colonization. In later years, other European immigrations from Corsica, France, Scotland, Ireland, Africa, Germany, China and Portugal to the island were recorded.

Tourism and manufacturing, particularly pharmaceuticals, are prime economic engines on 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 \$20,064; the average family income was \$33,559.

The U.S. Virgin Islands

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. It is an unincorporated territory of the United States administered by the Office of Insular Affairs, U.S. Department of the Interior. The governor and lieutenant governor are elected for four-year terms.

The land area covers 134 square miles with an overall population estimated to be 109,000. 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.



Storms and hurricanes have done significant damage in the past, closing the port to cruise ships for several years. These remain a threat during storm season.

Population of the US Virgin Islands: 1990 and 2000

Island	1990	2000	% 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	6.7

Source: US Census Bureau, *Statistical Abstract 2004-2005*.

⁴ Source: GSA Center, US Geological Center, *Island hydrology: Puerto Rico and the US Virgin Islands*, at <http://pr.water.usgs.gov/public/webb/webb010>

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%)⁵. Racial composition in the Virgin Islands is estimated to be 80% black, 15% white and 5% other. Spanish and Creole are spoken in addition to English.

Tourism is the major economic stimulus in the area as well as some manufacturing sectors. One of the world's largest petroleum refineries is located here. The unemployment rate is higher than the mainland at 10.6%³.

US Virgin Islands Population by Age Group: 2000, 2006

Age Group	2000	2006
0-24	42,855	37,792
25-54	44,883	43,286
55-64	11,652	14,630
65-74	5,931	8,096
75-79	1,626	2,217
80+	1,690	2,427
All	108,637	108,448

Source: US Bureau of the Census, International Database.

Renal Disease: Puerto Rico and the U.S. Virgin Islands

The number of newly diagnosed ESRD cases, was 1,076 in Puerto Rico and 31 in the Virgin Islands. Sixty-two percent of the newly diagnosed in Puerto Rico and 61% in the Virgin Islands were reported to have a primary diagnosis of diabetic nephropathy. This continued to parallel the national trend of the growing number of diabetics starting dialytic therapy and represents a marked increase from 1990 when diabetes as the primary cause in new cases was only 45%. Hypertension was the second highest reported diagnosis at 13% and 10%, with glomerulonephritis of the newly diagnosed caseload in Puerto Rico, with comparable rates in the Virgin Islands of 19% and 6% respectively.

These rates vary when analyzing the data received on all prevalent consumers alive at year-end 2006 on the islands. At year-end, 3,928 consumers received treatment, compared to the prior year 3,701, a 6% increase from 2005. Of these consumers, 56% reported diabetes as primary cause of renal failure, 13% glomerulonephritis, and 16% hypertensive disease. Comparable rates for the Virgin Islands were 47%, 10% and 31%. The majority of consumers in Puerto Rico were reported as white (50%), racially mixed (43%) and male (61%). In the Virgin Islands, 84% were African American and 61% male.

Age grouping was similar for both new cases and the prevalent patient population on the islands. In Puerto Rico, the incident and prevalent populations in the 50-69 age group were largest, 50% and 55% respectively. Twenty-nine percent of prevalent cases are between the ages of 30 and 54. Twenty-six percent of the incident cases are aged 70 or more.

In the Virgin Islands, the incident and prevalent populations in the 60-74 age group were largest, with 42% and 54% respectively. Twenty-nine percent of prevalent cases were between the ages of 30 and 54. Twenty-six percent of the incident cases were aged 70 or more.

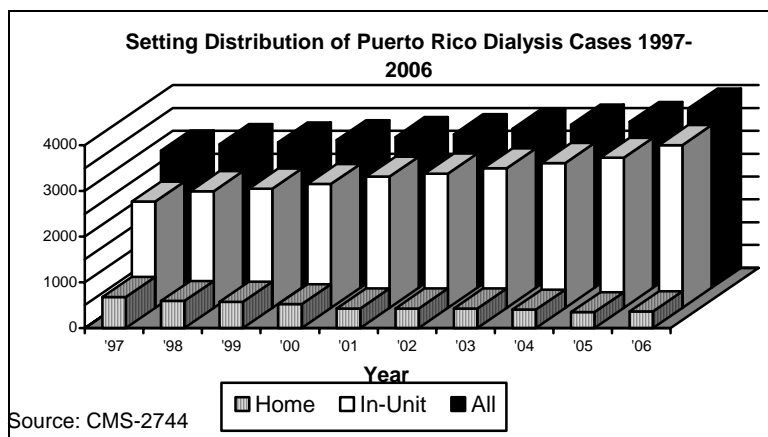
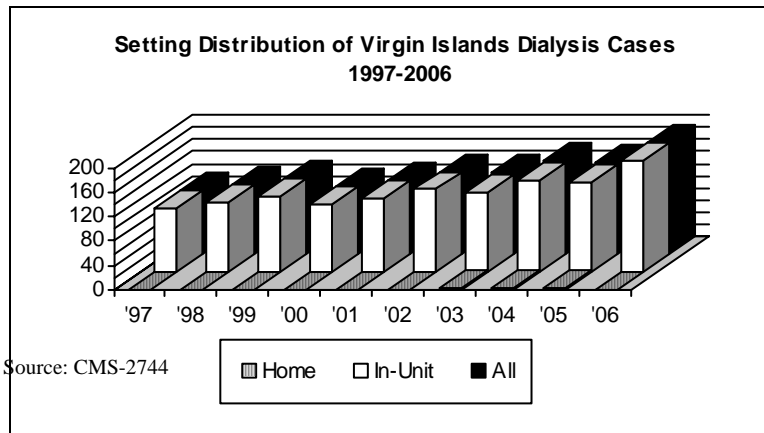
The primary cause of death for ESRD consumers treated in Puerto Rico at year-end was cardiac (33%), followed by infection (32%). The primary cause of death for ESRD consumers treated in the Virgin Islands at year-end was cardiac (31%); infection ranked second (28%).

⁵ Source: www.infoplease.com/ipa/A0113951; www.cia.gov/cia/publications/factbook/print/vq

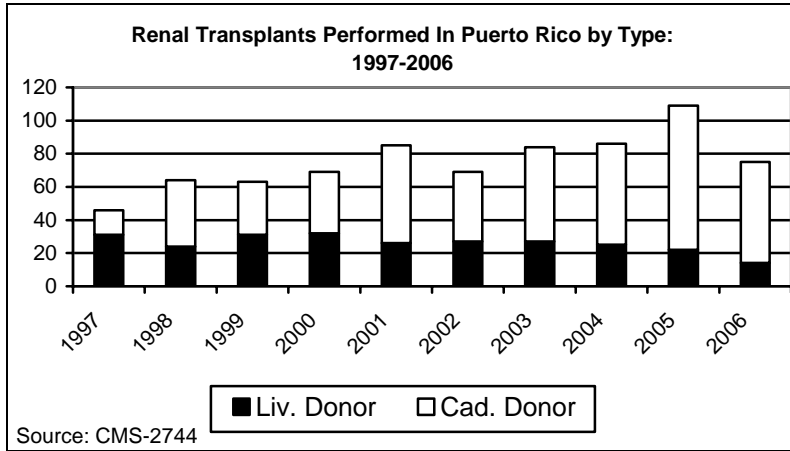
Treatment Modalities

Thirty-six facilities were approved to provide dialysis services on the island of Puerto Rico, one transplant center, and a non-Medicare veterans' hospital; 3 dialysis facilities were approved in the Virgin Islands. Twenty-nine facilities located on Puerto Rico were freestanding clinics and 8 were hospital-based units. The station count decreased in 2006 to 734 from 776 in 2003 (inclusive of Puerto Rico and the Virgin Islands). The three facilities on the Virgin Islands had a total of 30 stations and 183 cases at year-end.

Treatment choice by 3,565 (91%) consumers in Puerto Rico and all consumers in St. Thomas and St. Croix continued to favor staff-assisted hemodialysis. Self-care training in CAPD, CCPD and home hemodialysis was provided in Puerto Rico. Eighty-two percent of the home population in Puerto Rico was on home CCPD. In 2006, 297 consumers were on CCPD and 63 consumers were on CAPD; five consumers used home hemodialysis. The combined total of consumers on various forms of home dialysis in Puerto Rico was 363 in 2006, 400 in 2004, 521 in 2000, and 679 in 1998. In St. Croix, three consumers were on CAPD.



Seventy-five transplants were performed at the one Medicare-approved transplant center in 2006, a decrease of 31% from 2005. Of these procedures, 61 were from cadaveric donors and 14 from living donors. There were 481 consumers on an active waiting list.



Formerly, the organ procurement agency was located at the transplant hospital and was part of that organization. In 1996, a separate agency, Life Link of Puerto Rico, was established, which is affiliated with Life Link of Florida.

B. Network Structure

1) Staffing

Professional and clerical staff conducted daily activities of the network organization under the direction of the Board of Trustees and in accordance with federal guidance.

2) Names and Titles of Staff

Cheryl Brown <i>Data Clerk</i>	Beverly Hoek <i>QI Administrator</i>	Tricia Phulchand <i>Office Manager</i>
June Chronic Huhn <i>Patient Services Coordinator</i>	Chris Brown <i>Data Manager</i>	Patricia Llewelyn <i>QI Coordinator Community Outreach Coordinator</i>
Patricia Dorsa <i>Bookkeeper</i>	Joan Solanchick <i>Executive Director</i>	Amy Yeager <i>Clerk</i>

3) Key Responsibilities

Joan Solanchick, MSW, RN, Executive Director

Administered the financial and operational aspects of the contract, provided advice to the Board of Trustees and Network Council on goals, objectives, work plans, policies and procedures; maintained external relations through ongoing communication with other agencies, state programs and the general public; processes all patient grievances following established procedures, and supervised daily operations.

Beverly Hoek, RN, CNN, Quality Improvement Administrator

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.

Patricia Llewelyn, RN, CNN, Quality Improvement 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 and assisted with the clinical performance measures project.

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.

June Chronic Huhn, MPA, RN, CNN, Patient Services Coordinator

Assumed a proactive role in the facilitation and resolution of patient and/or facility situations. Maintained a computerized log of contacts in SIMS. Coordinated Patient Advisory Committee and appropriately focused their activities. Wrote patient newsletters and developed or identified new educational material for dialysis unit personnel and patients. Through educational programs promoted an increased awareness of treatment options and rehabilitation.

Chris Brown, BS, 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 of patient data and security, 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; and, 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 and part-time clerk. Monitored all project submissions as well as assisted in the implementation of facility transmission of VISION data and monitored complete and timely data submission. Assisted in meeting arrangements, supervised all bulk mailings and supported QI activities.

Amy Yeager, Clerk

Performed data entry of medical forms, provided copying and mailing support, assisted the office manager with QI activities.

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

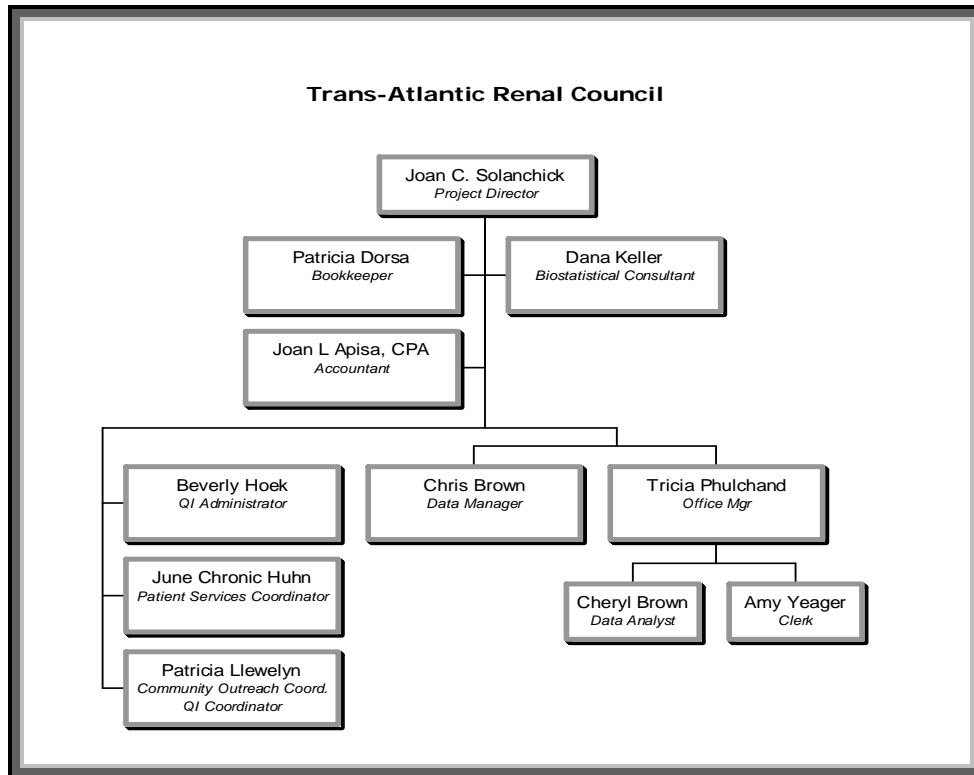
OPERATIONS

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 clinical performance measures project, 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 diskettes 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.



Network staff conducted ongoing data collection and processing, review of compliance with federal requirements as well as network goals and objectives, and distribution of pertinent information to all facilities within the defined geographic region.

The Council of member facilities provided the direction for monitoring performance outcomes and measuring the quality and appropriateness of care. The Medical Review Board and the Board of Trustees provided advice and expertise to achieve improvements in patient care. In addition, a resource pool of knowledgeable consumers and other highly skilled clinical nephrology professionals (physicians, registered nurses, social workers and dietitians) was developed to act in a consulting role for periodic review of educational materials, special studies, core indicators and speakers at educational meetings.

This resource pool has been valuable in assisting staff to test new data requirements and changes in quality improvement activities, and to analyze the impact of advancing technology or areas of interest. All board and committee members serve voluntarily with no compensation.

4) Committees

The basic committee structure included the Board of Trustees and the Medical Review Board. The Patient Advisory Committee is in the formation process and will provide insight and advice about educational needs as well as other areas under review. Other committees and subcommittees are established when the need arises.

5) Functional Description

Network Council

The Council provided broad direction and guidance in the development of goals for self-care, 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.

The Council was composed of thirty-three (33) regular members: twenty-four (24) from New Jersey, six (6) from Puerto Rico/Virgin Islands, and three (3) consumers. The formal Council representatives reflect the geographic area encompassed by the network as well as the various disciplines and types of facilities contained within the network. All Council members were selected from volunteers and approved by the Board of Trustees. Liaison members from governmental and voluntary agencies affiliated with the care of ESRD consumers were invited. Council meetings are open and a significant number of the renal community attends the annual meeting. The following chart illustrates the Council's composition.

North NJ	South NJ	Puerto Rico	Virgin Islands
2 consumer	1 consumer		
10 physicians	4 physicians	2 physicians	1 physician
3 registered nurses		2 registered nurses	
1 social worker	1 social worker		
2 administrator	1 administrator	1 administrator	
1 dietitian	1 dietitian		

Council formal representation by type of facility follows:

	New Jersey	Puerto Rico	Virgin Islands
Hospital-based	7	1	1
Non-profit satellite	4		
Corporate provider	13	4	
Patients	3		

Members included:

Alexandre Ackad, MD
Nephrologist
Hackensack University MC
Hackensack, New Jersey

Toros Kapoian, MD
Nephrologist
Robert Wood Johnson U MC
New Brunswick, New Jersey

Rosemary Acuna, RN
Kidney Transplant Patient
Livingston, New Jersey

Phyllis Leggett, MSW
Social Worker
DCA Manahawkin
Manahawkin, New Jersey

Kevin Barber, MD
Nephrologist
Bridgeton South Jersey Hospital
Bridgeton, New Jersey

Mary Lorenzo, MSW
Kidney Transplant Patient
Matawan, New Jersey

David Blecker, MD
Nephrologist
DCA Vineland
Vineland, New Jersey

Neil Lyman, MD
Nephrologist
ST. Barnabas MC
Livingston, New Jersey

Raphael Burgos Calderon, MD
Nephrologist

Phyllis Micchelli, LCSW
Social Worker

Atlantis Mayaguez
Mayaguez, Puerto Rico

John Capelli, MD
Nephrologist
Our Lady of Lourdes Hospital
Camden, New Jersey

William Chenitz, MD
Nephrologist
FMC Irvington
Irvington, New Jersey

Kim Davis, RN
Administrator
Lillian Booth Dialysis Unit
Westwood, New Jersey

Debra DiNuzzo, RD
Renal Dietitian
DVA Atlantic AAKC
Eatontown, New Jersey

Luis Emanuelli, MHA
Chief Executive Officer
Fresenius Medical Care
Puerto Rico

Paul Fine, MD
Nephrologist
Morristown Memorial Hospital
Morristown, New Jersey

Noemi Figueroa, BSN
Nurse manager
FMC Carolina
Carolina, Puerto Rico

Melvin Goldblat, MD
Nephrologist
Newark Beth Israel MC
Newark, New Jersey

Stuart Homer, MD
Nephrologist
DVA Perth Amboy
Perth Amboy, New Jersey

Wishburne Hunte, MD
Nephrologist
Roy Schneider Hospital
St. Thomas, USVI

Kevin James, MD
Vascular Surgeon
Morristown Memorial Hospital
Morristown, New Jersey

FMC East Orange
East Orange, New Jersey

Robert Motacki
Administrator
DCI North Brunswick
North Brunswick, New Jersey

Kenneth Noonan
Hemodialysis Patient
Neptune, New Jersey

Linda Powell, RD
Renal Dietitian
DCI Princeton
Princeton, New Jersey

Robert Rigolosi, MD
Nephrologist
Holy Name Hospital
Teaneck, New Jersey

Carlos Rivera, MD
Nephrologist
FMC San Juan
San Juan, Puerto

Paula Ruiz de Somocurio, RN
Administrator
Hackensack Medical Center
Hackensack, New Jersey

Marien Saade, MSN, CNN
Administrator, Lifelink
San Juan, Puerto Rico

Judith Scerbo
Regional Director
DVA Dialysis Centers, NJ

Judith Semptimphelter
Area Administrator
FMC Medical Care
New Jersey

Richard Sherman, MD
Nephrologist
Robert Wood Johnson U MC
New Brunswick, New Jersey

Ronald Zanger, MD
Nephrologist
DVA Cherry Hill
Cherry Hill, New Jersey

Suzanne Juliano, RN
Administrator
Holy Name Hospital
Teaneck, New Jersey

The Council met one time as allowed under contract. Comparative data on local and national goal attainment were discussed and the following educational programming was provided about new technology and areas of clinical relevance. The meeting was held on November 1, 2006, at the Sheraton Woodbridge Place, Iselin, New Jersey. Topics and speakers were:

<i>Council Activities</i>	Toros Kapoian, MD <i>President, Board of Trustees</i>
<i>KDOQI Clinical Practice Guidelines and Clinical Practice Recommendations for Diabetes and CKD</i>	Robert G. Nelson, MD, PhD <i>Staff Clinician, National Institutes of Health, Diabetes Epidemiology and Clinical Research National Institute of Diabetes and Digestive and Kidney Diseases</i>
<i>Challenges of Iron Management</i>	Steven Fishbane, MD <i>Chief, Division of Nephrology Program Director, Nephrology Fellowship Associate Chairman, Department of Medicine Winthrop University Hospital</i>
<i>The Complex World of the Diabetic ESRD Patient</i>	Mark Edward Williams, MD, FACP <i>Director of Dialysis, Beth Israel Deaconess MC Senior Medical Staff, Joslyn Diabetes Center Associate Professor of Medicine Harvard Medical School</i>

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

Facility staff are invited each year to highlight specific internal quality projects for the benefit of all meeting participants. Six posters were displayed at the annual meeting:

DCI North Brunswick, *Your Role in Eliminating Hepatitis B*, Lisa Bross Gajary, LPN, Marylou Clancy, RN, CNN, Neeta O' Mara Pharm D., BCPS

DCI St. Peter's Univ. Hosp , *Hematologic Abnormalities in Hemodialysis*, Madelaine Somera, PCT, Camille Angeles, PCT, Teresita Moulic, RN, CNN

Holy Name Hospital, *Improving Clinical Outcomes for Hepatitis B Infection Control*, Alice Campanelli, RN, BSN, CNN, CURN, Debra Wells, BSN, RN, CNN

Jersey Shore Univ.Hosp., *Kidney Initiative Project: MD CKD Staging and Medical Nutrition Therapy*, Jane Reinertsen, RD, Certified Diabetes Educator, Sharan Burke, MSN, RNC, Sara Jane Campbell, RN, CDN, Christina Frescki, Nutrition Aide, MBA, BS

Robert Wood Johnson Univ. Hosp, *The Efficacy and Safety of Intravenous Ascorbic Acid to Treat Hyperferritinemia in Patients on Chronic Hemodialysis*, Mary Barna, Doctor of Pharmacy, Donna Nelson-Henry, RN, BSN, Sarah Tomasello, PharmD, BCPS, Robin Roberts, RN, CNN, Toros Kapoian, MD, Medical Director, Colleen Gallery, Dialysis Database Manager, Garletha Allen, RN, BSN, CNN, DON, Dan Pieloch, MSRD

PV Lillian Booth Dialysis Center, *When a Sales Person Comes-a-Knocking: An Educational Guide for Nurses Regarding Sales People and Interpretive Statistics*, Kimberly Davis, RN, CNN

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 a patient representative. All of the members are engaged in ESRD treatment.

The 2006 Medical Review Board was composed of one consumer, one registered dietitian, one social worker, one administrator, three registered nurses and six physicians. Three members were from Puerto Rico and the remainder from New Jersey. The following chart illustrates the Medical Review Board's composition.

Type of Facility	North NJ	South NJ	Puerto Rico
Hospital-based	3 physicians	1 dietitian 2 physicians	
Non-profit satellite		1 administrator	
Corporate provider	1 nurse	1 social worker	1 physician 2 nurses
Patient	1 patient		

Members included:

Paul Fine, MD- Chairman
Nephrologist
Morristown Memorial Hospital
Morristown, New Jersey

Rosemary Acuna, RN
Patient Representative
Newark Beth Israel Medical Center
Newark, New Jersey

Marien Saade, RN, MSN, CNN
LifeLink de Puerto Rico
Guaynabo, Puerto Rico

Joseph Albanese, MD
Nephrologist
Jersey Shore Medical Center
Neptune, New Jersey

Kevin James, MD
Vascular Surgeon
Morristown Memorial Hospital
Morristown, New Jersey

Ira Strauss, MD
Nephrologist
DaVita Freehold AKC
Manalapan, New Jersey

Cori Nunziata, LSW
Social Worker
DCI North Brunswick Dialysis Ctr
North Brunswick, New Jersey

Cathy Stevens, RN
Disaster Coordinator
Hackensack Medical Center
Hackensack, New Jersey

Sadanand Palekar, MD
Program Director of Pancreas and Renal
Transplant Program
Newark Beth Israel Medical Center
Newark, New Jersey

Judy Semptimphelter, RN
Area Administrator
Fresenius Medical Care, NJ

Pascual Muniz, RN
Regional QI Manager
Fresenius Medical Care
Mayaguez, Puerto Rico

Shaun Segal, RD
Dietitian
Winslow Dialysis Center
Sicklerville, New Jersey

Manual Cruz Soto, MD
Nephrologist
Vega Baja Renal Dialysis Center
Vega Baja, Puerto Rico

The Board of Trustees accepted nominees for election to the Medical Review Board from active organizational members. An individual must have demonstrated an ability to evaluate the quality and appropriateness of care delivered to renal failure patients to serve on the Medical Review Board.

The Medical Review Board has the responsibility for the development of criteria and standards for evaluation of care; review of facility protocols for patient modality selection; review of patient grievances as necessary, according to standard procedures adopted by the Board; development of protocols for individual case review; evaluation of existing available services and recommendations for the addition of alternative services as needed; the analysis of facilities' compliance with network goals and recommendations for improvement.

No person serving on the Medical Review Board had responsibility for review of any case in which he or she has, or had, any professional involvement, received reimbursement or supplied goods. No person serving on the Medical Review Board with a financial interest, direct or indirect, in a facility furnishing ESRD services reviewed the ESRD services of that facility. Confidentiality assurances were utilized by the Medical Review Board to protect the rights of consumers, providers, and facilities.

The 2006 activities included review of facility-specific data, reports of the Clinical Performance Measures project, the lab data collection for the last quarter of 2005, the National Vascular Access Improvement Initiative, and other data from CMS. There were no patient grievances to review.

The 2006 Medical Review Board meeting dates and locations were:

March 22 - Forsgate (Jamesburg, NJ)	June 7 - conference call
September 13 - Forsgate (Jamesburg, NJ)	December 6 - conference call

BOARD OF TRUSTEES

The Board of Trustees consisted of twelve (12) members. Upon resignation of a member, inability to complete a term of office, or non-attendance at two (2) consecutive board meetings, the position would be deemed vacant and filled by a new member selected by the president of the board. The new member then would serve for the unexpired term held by the member whose position he or she filled.

The Board elected from among its membership the following officers: president, vice president, secretary and treasurer. The president served as the president of the board and chairman of the Council, and monitored all network operations with the project director. The vice president presided or acted in the absence of the president. The secretary was responsible for keeping minutes of all board meetings and assured proper maintenance of all records and reports (except financial) for the Council. The treasurer was responsible for reporting the financial status and budget preparation of the Council.

The Board of Trustees was composed of one consumer, one dietitian, one social worker, one administrator, two nurses and six physicians. In order to more completely review vascular access a surgeon was invited to join the Board. One board member was from Puerto Rico, one from the Virgin Islands with the remainder from New Jersey. The chart below shows the Board's composition.

Type of Facility	North NJ	South NJ	Puerto Rico	Virgin Islands
Hospital-based	2 nurses 1 social worker 1 physician	1 physician		1 physician
Non-profit satellite	1 physician	1 administrator		
Corporate provider	1 admin	1 dietitian	1 physician	
Patient		1 patient		

Toros Kapoian, MD- President Robert Wood Johnson U MC New Brunswick, New Jersey	Ron Zanger, MD Nephrologist DVA Cherry Hill Cherry Hill, New Jersey	Wishburne Hunte, MD Nephrologist Roy Schneider Hospital St Thomas, VI
Alexandre Ackad, MD Nephrologist Hackensack University MC Hackensack, New Jersey	Michael Conrad, MD Nephrologist DVA Burlington Lumberton, New Jersey	Mary Buckley O'Dell, RN Nurse Administrator Morristown Memorial Hospital Morristown, NJ
Jennifer Kurzawa, RD Renal Dietitian DVA Old Bridge Old Bridge, New Jersey	Suzanne Juliano, RN Nurse Administrator Holy Name Hospital Teaneck, New Jersey	Paula Ruiz de Somocurio, RN Administrator Hackensack Medical Center Hackensack, New Jersey
Mary Lorenzo, MSW Matawan, New Jersey	Phyllis Micchelli, MSW Social Worker FMC East Orange East Orange, New Jersey	Chandra Chandran, MD Nephrologist St. Joseph's Medical Center Paterson, New Jersey

The election of officers took place at a regularly scheduled meeting of the Board. Election of officers was by simple majority of those members present and voting.

The Board monitored and directed the daily operation of the network organization. The board has the authority to:

- Employ and terminate any personnel required for the business of the network;
- Prepare a plan which defines network goals, objectives and implementation of objectives;
- Prepare an evaluation methodology to measure progress;
- Develop network operating and governing policies and procedures;
- Suggest alternative approaches to meeting goals and objectives for the network's consideration;
- Review and update the network plan on a regular basis;
- Review all fiscal matters of the network and review records on such matters, which include, but are not limited to, the collection and disbursement of all funds;
- Certify the representatives for appointment to the Council, and keep up-to-date records of the membership of the Council;
- Appoint members and designated alternates to the Medical Review Board; and
- Review the By-Laws, amending them when necessary.

To further assure a broad perspective on appropriateness of care and outcome measurements, a transplant 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.

The 2006 Board of Trustees meeting dates and locations were:

March 29 - Forsgate (Jamesburg, NJ)
June 21 - conference call

September 20 - Forsgate (Jamesburg, NJ)
December 13 - conference call

PATIENT ADVISORY COMMITTEE

On February 28, 2006, an invitation was sent to all Ahmet Ahmet Award nominees in New Jersey requesting volunteers for the new Patient Advisory Committee (PAC). Facility managers and social

workers were asked to recommend patients who would be able to attend meetings and actively participate in its development. The committee was charged to provide consumer advice to the boards and other committees on such matters as, but not limited to, quality improvement activities, content and format of TARC's web site; content and format of patient educational material; improvement of communication between consumers and facility staff; direct attention to areas/issues of consumer concern.

Membership was open to all patients, family members and interested parties. The first meeting was held on June 29, 2006, in Jamesburg, New Jersey. The agenda included committee responsibilities, acceptance of the charter and rules of participation.

The committee held a second meeting on September 28, 2006, when members reviewed and discussed the goal statement, member agreement, and the conflict of interest statement. A logo was selected and a plan for the patient newsletter entitled *Kidneys R US* was formulated. At subsequent meetings the group formatted the newsletter, adopted a logo, and agreed upon these initial articles for publication: *What is the Patient Advisory Committee?*, *Ahmet Ahmet Rehabilitation Award Winner* and *What is TARC?* Additional information included: the TARC toll free number, and how to join the PAC. The newsletter was scheduled for distribution January 2007. The chart below shows the PAC composition.

Modality	North NJ	South NJ	Puerto Rico/VI
Hemodialysis	4	4	Winter 2007
Peritoneal dialysis	1		
Transplant	1	2	

Membership included:

Rosemarie Acuna, RN Livingston, New Jersey Transplant	Susan Esposti Mercerville, New Jersey Hemodialysis	Sabrina Sims Bloomfield, New Jersey Hemodialysis
William Curry Camden, New Jersey Hemodialysis	Robert Horst Plainsboro, New Jersey Peritoneal Dialysis	Angela Taggart Rahway, New Jersey Hemodialysis
Vernon Davis Mount Laurel, New Jersey Hemodialysis	Mary Lorenzo, MSW Matawan, New Jersey Transplant	John O'Grady Piscataway, New Jersey Hemodialysis
John DiFabio Harrington Park, New Jersey Transplant	Kenneth Noonan Neptune, New Jersey Hemodialysis	Stephen Elsey Mount Laurel, New Jersey Hemodialysis

The 2006 Patient Advisory Committee meeting date and locations were:

June 29 - Forsgate (Jamesburg)	September 28 - Marriott (Monroe)
October 26 - Marriott (Monroe)	November 1 - Sheraton (Iselin)
	December 23 - conference call

TARC plans to hold the first Patient Advisory Committee meeting in Puerto Rico and the U.S. Virgin Islands during the winter of 2007.