Intermountain End-Stage Renal Disease Network, Inc.

(ESRD Network Organization #15)

ANNUAL REPORT 2007

CENTERS FOR MEDICARE & MEDICAID SERVICES
Contract Number: HHSM-500-2006-NW015C

**"The mission of
Intermountain End-Stage Renal Disease Network, Inc.
is to facilitate improvement of the quality
of care provided to ESRD patients."**

January 1, 2007 - December 31, 2007

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I. PREFACE

STATEMENT BY PRESIDENT OF THE BOARD OF DIRECTORS OF THE INTERMOUNTAIN ESRD NETWORK, INC.
(Also known as ESRD Network #15)

This annual report for the period of January 1, 2007 through December 31, 2007 is submitted to the Centers for Medicare & Medicaid Services Office of Clinical Standards and Quality. This report provides both a narrative account and substantiating data to describe the activities and the ESRD patient population of Network #15 for that time period.

On July 29, 2006, the Intermountain End-Stage Renal Disease Network, Inc. was awarded the contract for the ESRD Network #17 organization. Western Pacific Renal Network, LLC (ESRD Network #17) finished its transition activities in 2006. The activities of ESRD Network #17 are summarized in a separate report.

During the twelve months covered by this report, ESRD Network #15 performed all functions and completed all activities required by its contract (HHSM-500-2006-NW015C). The majority of Network #15 resources were dedicated to Quality Improvement, Patient Services and Data Collection activities. As in past years, Network #15 ranks in the top quartile of ESRD Networks in most nationally measured ESRD outcomes.

The Board of Directors extends its appreciation to all Network #15 providers who have cooperated in working toward the successful accomplishment of Network goals in 2007. In addition, the time and energy spent by the renal professionals and patients serving on Network boards and committees are gratefully acknowledged.

Raymond L. Heilman, MD
President

2007 Annual Report

Intermountain End-Stage Renal Disease Network, Inc.
Contract Number HHSM-500-2006-015C

II. INTRODUCTION

The ESRD Amendments to the Social Security Act of 1972 contained language for the establishment of a structure of "End-Stage Renal Disease Network Councils" to assist the entity now known as the Centers for Medicare & Medicaid Services (CMS) in the monitoring of the quality of care given to the ESRD patients by providers of dialysis services and transplantation. The Intermountain End-Stage Renal Disease Network, Inc. (ESRD Network #15) was one of the 32 original ESRD Networks and, since 1988, has been one of 18 consolidated ESRD Network Organizations under contract with CMS. The Board of Directors of ESRD Network #15 has established the following goals:

- To facilitate optimal care to all ESRD patients, working in cooperation with facilities' internal quality improvement programs and through the support of the CMS Health Care Quality Initiative Program (HCQIP):
  CMS' definition of quality care under the HCQIP includes access to care, appropriateness of care, desired outcomes of care, and consumer satisfaction;

- To sustain the Network #15 administrative framework to optimally plan, implement, and evaluate Network responsibilities and goals and to complete all CMS contract requirements;

- To maintain a patient-specific medical information system based on the data set required by CMS and to meet and/or exceed all data reporting requirements of CMS;

- To support the CMS goal for the Network program of improving data reporting, reliability, and validity between ESRD providers/facilities, Networks, and CMS;

- To promote access to appropriate modalities, including self-care and transplantation;

- To promote patients' knowledge of and involvement in their ESRD care, and to promote patients' rehabilitation;

- To serve as a resource and clearinghouse for information to the renal community, including information on patterns, processes, and outcomes of care in order to aid in

identifying opportunities for improvement as well as the results of both successful and unsuccessful improvement projects;

- To assist facilities in developing, implementing, and evaluating intervention strategies to improve patient care and outcomes;
- To facilitate resolution of patient grievances;
- To work collaboratively with other organizations to facilitate the improvement of care to ESRD patients; and
- To promote patient-centered care.

These goals are approached through means that are patient-centered, safe, effective, efficient, equitable, and timely. It is expected that the outcomes will be measurable, using valid, evidence-based performance indicators; strategies are developed through broad consensus and have strong correlation to patient outcomes. The Network will embrace cultural change and process redesign. These goals are communicated annually to the Network providers via the "Annual Update" mailing, which is sent to the facilities each year (Appendix A).

Network #15 continues to pursue these goals through the leadership of knowledgeable individuals serving on the Network #15 Board of Directors, Medical Review Board, Patient Leadership Committee, and other Network committees and with the cooperation of the personnel in the ESRD programs throughout the Intermountain region. This annual report will describe the activities Network #15 has undertaken with these goals as the focus.

A. Network Description

The following description of the Network #15 area provides an overview of the general pattern of the delivery of ESRD care in Network #15. The description of the states that comprise this geographically large Network is included in this report to assist in understanding the logistics and complexity of administering an ESRD Network Organization that covers a large geographic area and multiple governmental entities.

Network #15 includes the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. These states encompass 21% of the landmass of the contiguous states. They include mountains, plains, and desert. Tourism and travel are major industries. (Water availability limits growth.) Urban population centers contain the majority of residents; there are vast rural and wilderness areas in each state.

Network #15 Demographics at a Glance

Race and Ethnicity in Thousands (2007 Estimates)								
		US	AZ	CO	NV	NM	UT	WY
Total		301,621	6,339	4,862	2,565	1,970	2,645	523
White		241,167 (80.0%)	5,513 (87.0%)	4,370 (89.9%)	2,087 (81.4%)	1,664 (84.5%)	2,465 (93.2%)	515 (94.1%)
Ethnicity	Not Hispanic/ Hispanic	82.6%/ 17.4%	67.9%/ 32.1%	79.4%/ 20.6%	71.2%/ 28.8%	50.1%/ 49.9%	88.3%/ 11.7%	92.8%/ 7.2%
Black		38,757 (12.9%)	252 (4.0%)	206 (4.2%)	204 (8.0%)	56 (2.8%)	32 (1.2%)	6 (1.2%)
Ethnicity	Not Hispanic/ Hispanic	95.6%/ 4.4%	85.7%/ 14.3%	90.0%/ 10.0%	91.1%/ 8.9%	74.5%/ 25.5%	79.9%/ 20.1%	85.6%/ 14.4%
Am Indian/AK Nat.		2,938 (1.0%)	297 (4.7%)	57 (1.2%)	36 (1.4%)	186 (9.5%)	35 (1.3%)	13 (2.5%)
Ethnicity	Not Hispanic/ Hispanic	82.6%/ 17.4%	67.9%/ 32.1%	63.6%/ 36.4%	73.7%/ 26.3%	91.1%/ 8.9%	85.9%/ 14.1%	91.6%/ 8.4%
Asian		13,366 (4.4%)	157 (2.5%)	130 (2.7%)	158 (6.1%)	28 (1.4%)	52 (2.0%)	4 (0.7%)
Ethnicity	Not Hispanic/ Hispanic	97.9%/ 2.1%	93.9% 6.1%	96.3%/ 3.7%	97.2%/ 2.9%	88.6%/ 11.4%	96.9%/ 3.1%	94.4%/ 5.6%
Nat. Hawaiian/ Pacific Islander		537 (0.2%)	13 (0.2%)	7 (0.1%)	13 (0.5%)	3 (0.1%)	19 (0.7%)	0.4 (0.1%)
Ethnicity	Not Hispanic/ Hispanic	77.7%/ 22.3%	65.3%/ 34.7%	68.2%/ 31.2%	85.1%/ 14.9%	48.7%/ 51.3%	94.5%/ 5.5%	86.9%/ 13.0%
Two or more races		4,856 (1.6%)	106 (1.7%)	92 (1.9%)	67 (2.6%)	33 (1.7%)	42 (1.6%)	7 (1.4%)
Ethnicity	Not Hispanic/ Hispanic	86.6%/ 13.4%	79.3%/ 20.7%	82.8%/ 17.2%	85.1%/ 14.9%	72.1%/ 27.9%	88.3%/ 11.7%	89.0%/ 11.0%
Ethnicity in Thousands (2007 Estimates)								
Not Hispanic or Latino		256,117 (84.9%)	4,461 (70.4%)	3,895 (80.1%)	1,921 (74.9%)	1,095 (55.6%)	2,339 (88.4%)	484 (92.7%)
Hispanic or Latino		45,504 (15.1%)	1,878 (29.6%)	966 (19.8%)	645 (25.1%)	875 (44.4%)	307 (11.6%)	38 (7.3%)

Source: U.S. Census Bureau, Population Division, Estimates of the Population by Race and Hispanic Origin for the United States and States: July 1, 2007 (SC-EST2007)

Population by Age in Thousands (2007 Estimates)

	US	AZ	CO	NV	NM	UT	WY
Total	301,621	6,339	4,862	2,565	1,970	2,645	523
Percentages by age group [4]							
0 to<5	6.9%	7.9%	7.2%	7.6%	7.4%	9.7%	6.9%
5 to <18	17.6%	18.5%	17.3%	18.2%	18.1%	21.3%	17.1%
18 to <45	37.6%	37.4%	39.5%	38.1%	36.7%	40.6%	36.0%
45 to <65	25.4%	23.3%	25.9%	25.0%	25.1%	19.6%	27.8%
65 +	12.6%	12.9%	10.1%	11.1%	12.7%	8.8%	12.2%

Source: U.S. Census Bureau, Population Division, Annual Estimates of the Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2000 to July 1, 2007 (NC-EST2007)

Physicians per 10,000 Population							
	US	**AZ**	**CO**	**NV**	**NM**	**UT**	**WY**
1995[1]	24.2	21.4	23.7	16.7	20.2	19.2	15.3
1999[2]	25.2	21.5	24.8	18.3	21.1	19.7	17.2
2004[3]	28.1	22.5	26.8	19.6	23.8	21.5	19.1
2007[3]	32.3	26.6	31.0	22.8	27.9	24.1	22.8

Sources: [1] Statistical Abstract of the United States, 2006 Edition, [2] National Center for Health Statistics FastStats, 2000, [3] The Kaiser Family Foundation, statehealthfacts.org, 2004 and 2007

Population Distribution by Metropolitan Status, states (2005-2006), U.S. (2006)							
	US	**AZ**	**CO**	**NV**	**NM**	**UT**	**WY**
Metropolitan	84%	87%	87%	88%	65%	76%	29%
Non-metropolitan	16%	13%	13%	12%	35%	24%	71%

Sources: Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2006 and 2007 Current Population Survey (CPS: Annual Social and Economic Supplements).

Percent of Adults Who Have Ever Been Told by a Doctor that They Have Diabetes, 2005							
	US	**AZ**	**CO**	**NV**	**NM**	**UT**	**WY**
	7.3%	7.5%	4.8%	7.1%	7.3%	5.5%	6.5%

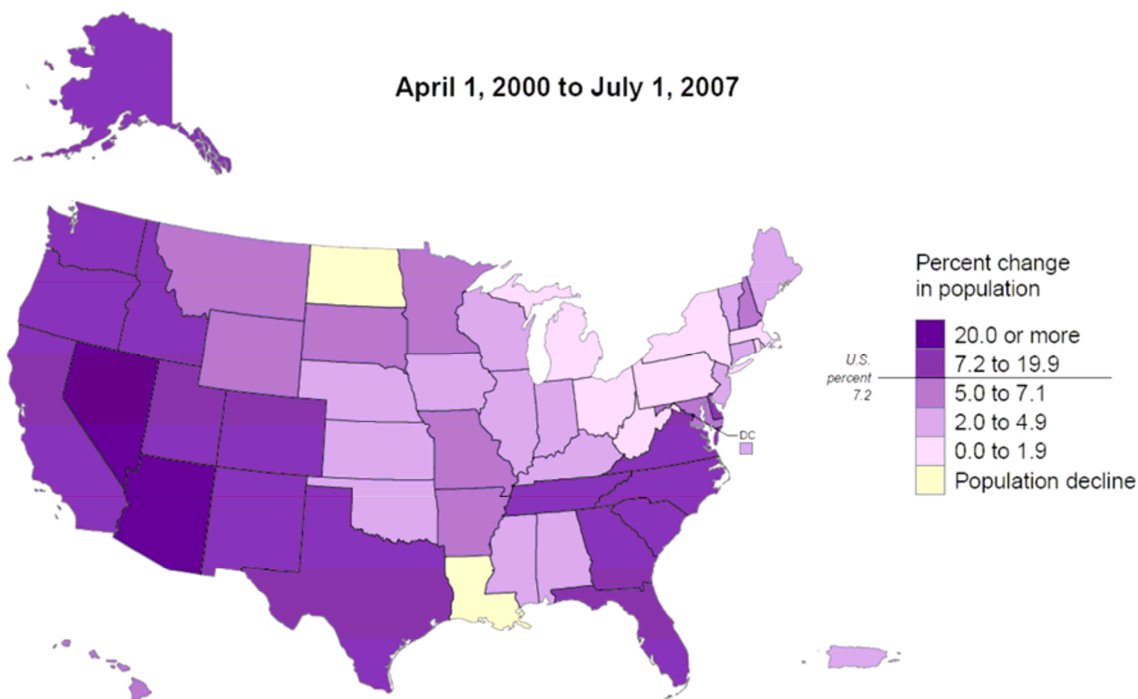
Notes: All data are self-reported. Respondents were asked the question, "Have you ever been told by a doctor that you have diabetes?".
Sources: Behavioral Risk Factor Surveillance System, 2005; analysis by the National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity, Centers for Disease Control and Prevention, available at http://apps.nccd.cdc.gov/brfss/list.asp?cat=DB&yr=2005&qkey=1363&state=All.

Population -- Ranks

Population (In 1,000s)	1990 Population/ Rank	2000 Population/ Rank	2007 Population** / Rank	% Change 2000 to 2007**	% Change 2006 to 2007 Rank
United States	248,700	281,422	301,621	7.2%+	
Arizona	3,665/**24**	5,131/**20**	6,339/**16**	19.1%+	**2**
Colorado	3,294/**26**	4,301/**24**	4,862/**22**	11.5%+	**8**
Nevada	1,202/**39**	1,998/**35**	2,565/**35**	22.1%+	**1**
New Mexico	1,515/**37**	1,819/**36**	1,970/**36**	7.7%+	**13**
Utah	1,723/**35**	2,233/**34**	2,645/**34**	15.6%+	**3**
Wyoming	454/**50**	494/**50**	523/**51**	5.5%+	**9**

Source: Population Estimates Program, U.S. Census Bureau Release date: December 27, 2007

The three fastest growing states in the nation from 2006 to 2007 are in Network #15: Nevada (1), Arizona (2), and Utah (3). Colorado is 8th, Wyoming is 9th, and New Mexico is 13th. An increase in the number of dialysis patients and providers in the region have accompanied this population growth. Additionally, this region has a high percentage of Native Americans whose population growth rate is higher and whose incidence of ESRD is above that of the Anglo population.

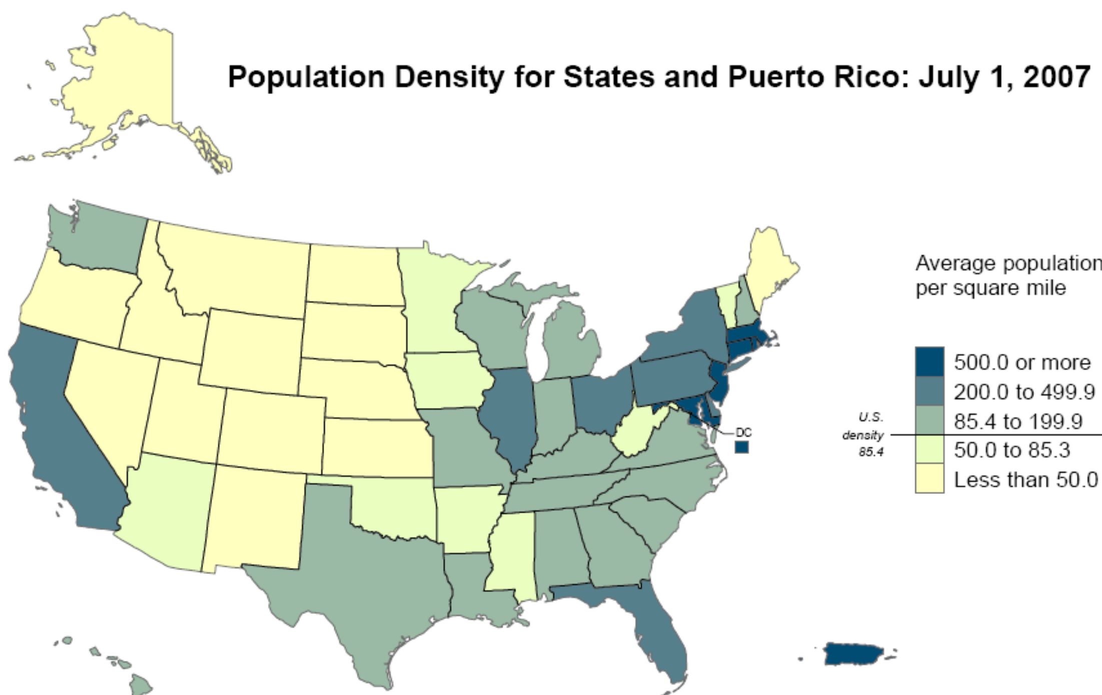


Land Mass

	Total Land (Sq. Miles)[1]	Pop/Sq. Mile (1990)[2]	Pop/Sq. Mile (2000)[1]	Pop/Sq. Mile (2007)[3]
U.S.	3,537,438	70	80	85
Arizona	113,635	32	45	54
Colorado	103,718	32	41	46
Nevada	109,826	11	18	23
New Mexico	121,356	12	15	16
Utah	82,144	21	27	31
Wyoming	97,100	5	5	5

Sources: [1] Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrix P1. [2]Source: U.S. Census Bureau, 1990 Census of Population and Housing, Summary Tape File 1 (100% Data), Matrix P1., [3] Source: US Census Bureau, Population Estimates Program Tables and More Information: Population Estimates Program.

Nationally, 28.8% of all land is federally owned (2004). In Network #15, that percent ranges from 84.5% in Nevada to 36.6% in Colorado. The average national population density is 84.7 persons per square mile of land, including Alaska and Hawaii (2007). In the Network #15 area, the population density ranges from five persons per square mile in Wyoming to 54 persons per square mile in Arizona.



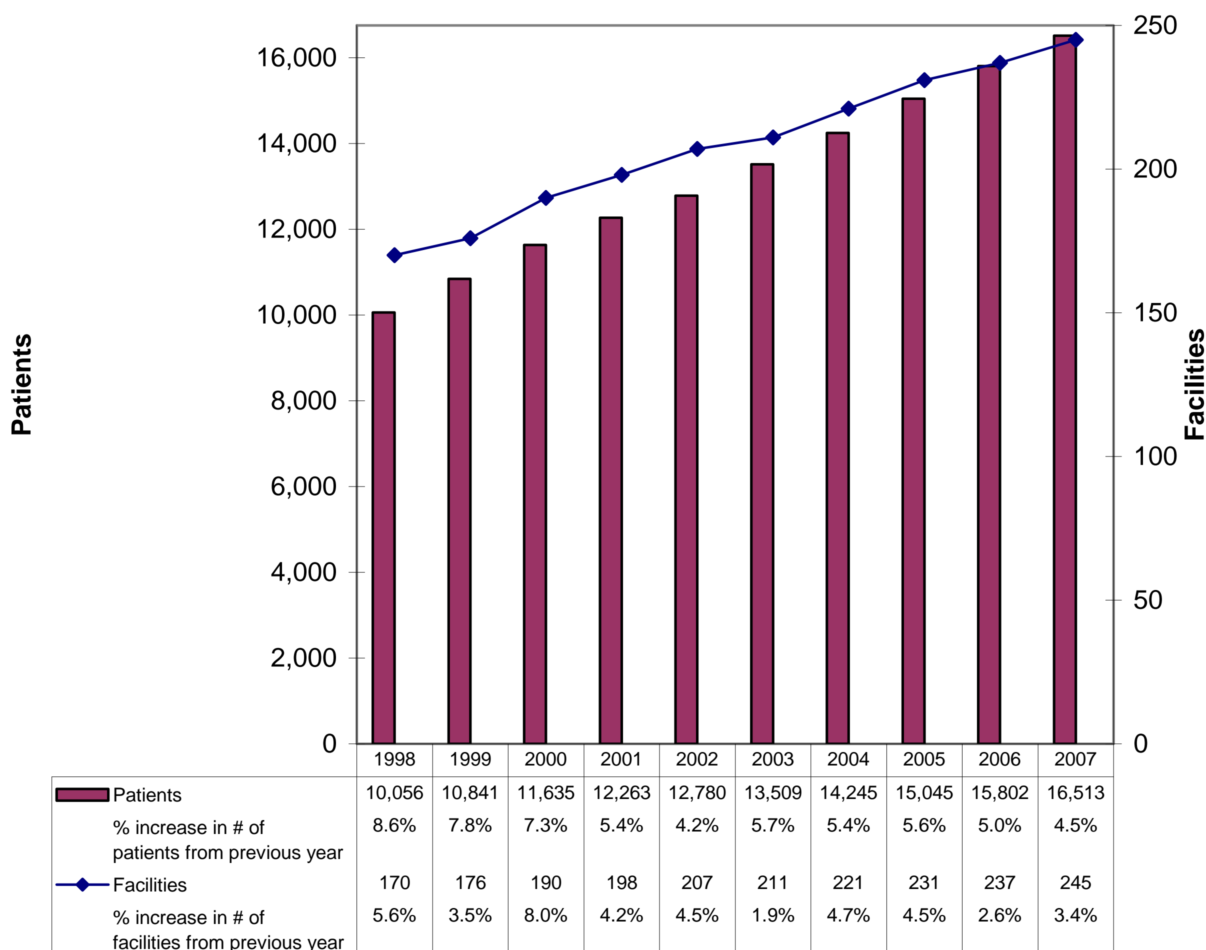
Network #15 ESRD Demographics at a Glance

As of December 31, 2007, there were 16,513 patients on chronic dialysis in Network #15's 237 Medicare-certified dialysis facilities. An additional 111 patients began chronic dialysis in Network #15 prior to January 1, 2008, but did not begin receiving care in a Medicare-certified chronic dialysis facility until 2008.

During 2007, Network #15's 14 active transplant centers performed 927 kidney transplants.

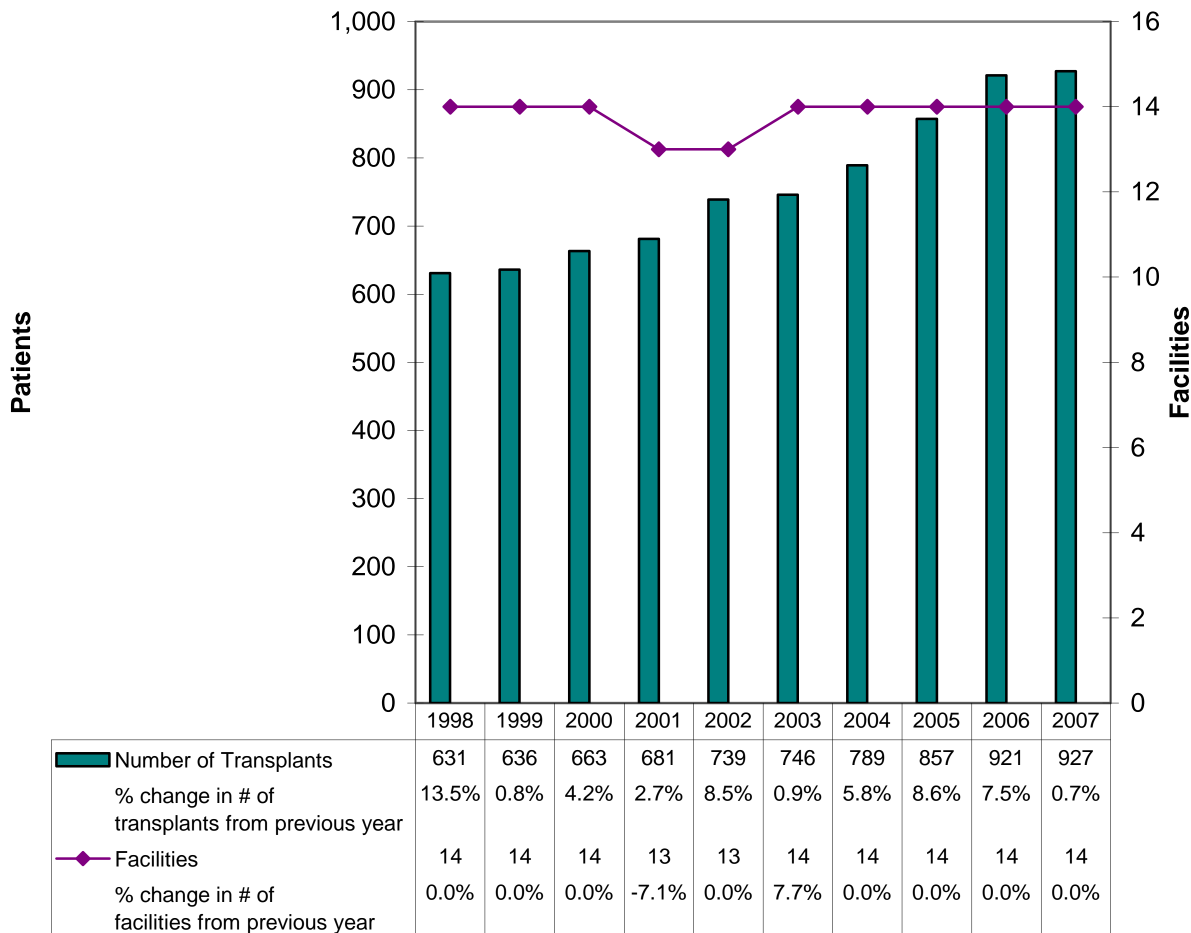
Tables documenting the changes in the number of dialysis and transplant patients and facilities from 1998 through 2007 are shown below.

Number of Patients Receiving Dialysis in Network #15 and Number of Facilities 1998-2007



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Patients	10,056	10,841	11,635	12,263	12,780	13,509	14,245	15,045	15,802	16,513
% increase in # of patients from previous year	8.6%	7.8%	7.3%	5.4%	4.2%	5.7%	5.4%	5.6%	5.0%	4.5%
Facilities	170	176	190	198	207	211	221	231	237	245
% increase in # of facilities from previous year	5.6%	3.5%	8.0%	4.2%	4.5%	1.9%	4.7%	4.5%	2.6%	3.4%

Number of Patients Receiving a Transplant in Network #15 and Number of Transplant Facilities 1998-2007



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Transplants	631	636	663	681	739	746	789	857	921	927
% change in # of transplants from previous year	13.5%	0.8%	4.2%	2.7%	8.5%	0.9%	5.8%	8.6%	7.5%	0.7%
Facilities	14	14	14	13	13	14	14	14	14	14
% change in # of facilities from previous year	0.0%	0.0%	0.0%	-7.1%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%

The table on the following page is an overview of dialysis and transplant information for Network #15 and the six states it comprises.

ESRD Network #15 2007 Demographics

		Network #15	AZ	CO	NV	NM	UT	WY
Total Population*		18,903,727	6,338,755	4,861,515	2,565,382	1,969,915	2,645,330	522,830
Prevalent Dialysis Patients**								
Number of Patients	**#**	**16,513**	**6,747**	**3,360**	**2,294**	**2,451**	**1,303**	**248**
% of Total Population	%	***0.09%***	***0.11%***	***0.07%***	***0.09%***	***0.12%***	***0.05%***	***0.05%***
Male	#	9,218	3,709	1,905	1,354	1,309	735	149
% of patients	%	***55.8%***	***54.9%***	***56.7 %***	***59.0%***	***53.4%***	***56.4%***	***60.1%***
Primary dx Diabetes	#	8,615	3,670	1,608	1,024	1,495	659	103
% of patients	%	***52.2%***	***54.4%***	***47.9%***	***44.6%***	***61.0%***	***50.1%***	***41.5%***
Hispanic Patients	#	4,791	2,109	971	409	1,064	180	24
% of patients	%	***29.0%***	***30.3%***	***28.9%***	***17.8%***	***43.4%***	***13.8 %***	***9.7%***
American Indian Pts	#	2,209	1166	69	77	761	86	23
% of patients	%	***13.4%***	***17.3%***	***2.1%***	***3.4%***	***31.0 %***	***6.6%***	***9.3%***
InCenter Hemodialysis Pts	#	15,109	6,217	3,047	2,068	2,223	1,087	234
% of patients	%	***91.5%***	***92.1%***	***90.7%***	***90.2%***	***90.7%***	***83.4%***	***94.4%***
Mean age of Prevalent Pts		61.6	62.4	60.5	59.7	61.4	59.9	60.6
Incident Patients**								
Number of Patients	**#**	**4,999**	**2,079**	**916**	**829**	**609**	**439**	**67**
Male	#	2,914	1,186	541	505	358	244	44
% of incident patients	%	***58.3%***	***57.0%***	***59.1%***	***60.9%***	***58.1%***	***55.6%***	***65.7%***
Primary dx diabetes	#	2,517	1,069	447	363	361	224	27
% of incident patients	%	***50.4%***	***51.4%***	***48.8%***	***43.8%***	***59.3%***	***51.0%***	***40.3%***
Hispanic Patients	#	1,268	579	215	122	283	51	6
% of incident patients	%	***25.4%***	***27.8%***	***23.5%***	***14.7%***	***46.5%***	***11.6%***	***9.0%***
American Indian Pts	#	379	201	12	19	118	16	4
% of incident patients	%	***7.6%***	***9.7%***	***1.3%***	***2.3%***	***19.4%***	***3.6%***	***6.0%***
Mean age of Incident Pts		62.0	62.5	61.4	61.6	61.8	59.6	58.1
Facilities								
# of Dialysis Facilities		245	98	50	28	34	26	9
# of Transplant Units		14	4	4	2	2	2	0
# New dx units certified in 2007		10	2	0	4	2	2	0
# Units closed in 2007		2	1	0	0	1	0	0
Veterans Health Administration Units		5	2	1	0	1	1	0

* Annual Estimates of the Population: April 1, 2000 to July 1, 2007 (SC-EST2007) Source: Population Division, U.S. Census Bureau.
** Network #15 SIMS Data
Note: States do not add up to Network Total because some patients reside in states outside of Network #15 but dialyze in Network #15.

Arizona

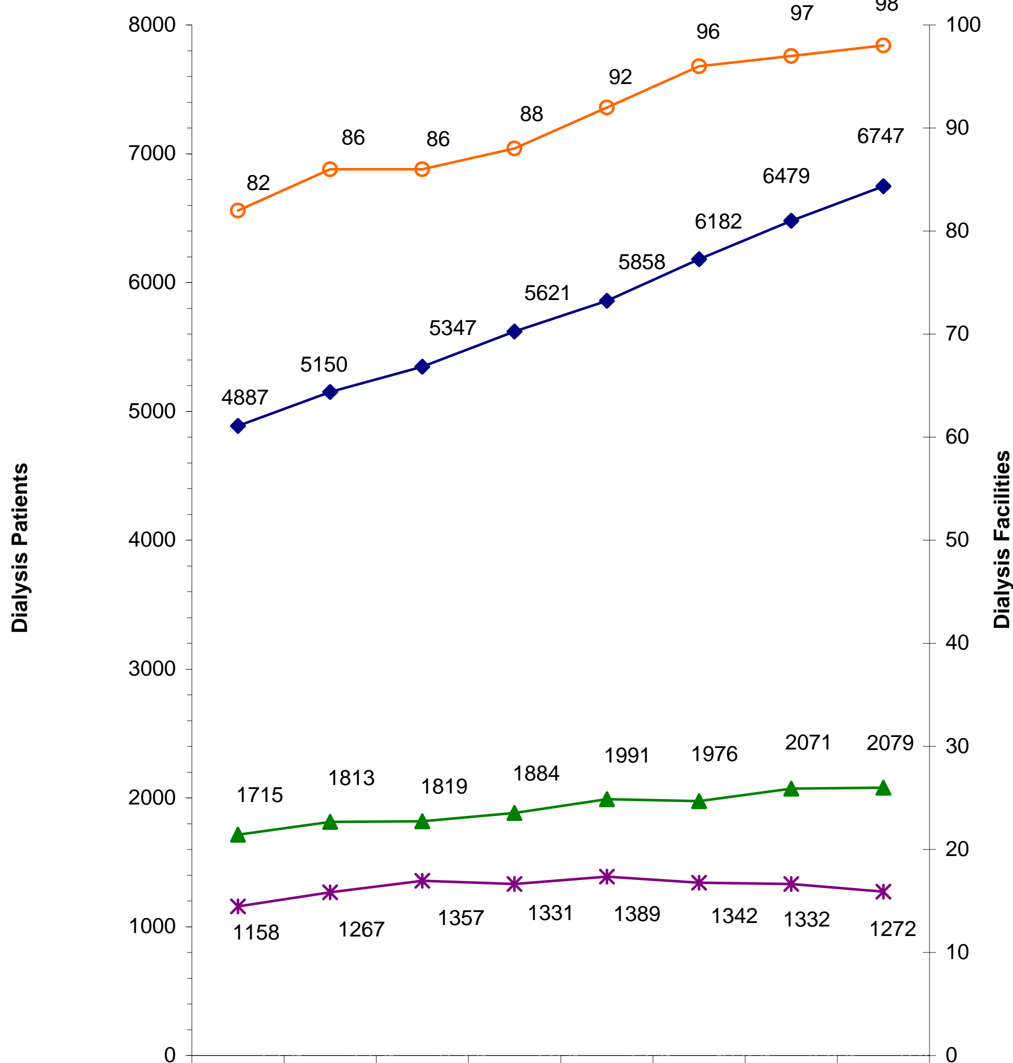
Arizona is the sixth largest state in the nation with an area of 113,635 square miles. It is part of the Sun Belt area, the popularity of which is partially attributed to the sunny days and low humidity. From 2000 to 2007, Arizona's rate of population change was 19.1%, the second fasted in the nation; this growth is occurring largely in the over-65 age group. California, Nevada, Utah, New Mexico, and the Republic of Mexico bound Arizona. The topography can be divided into three areas: northern plateaus, central mountains, and southern deserts. The Grand Canyon is only one of several scenic areas that draw tourists. The mountain region is rich in minerals. The major industries are: manufacturing, tourism and travel, agriculture, and mining. Arizona leads the U.S. in copper production.

In 2007, 87% of the population lived in metropolitan areas. 12.9% of Arizona's population is 65 years of age or greater. Whites (including Hispanic Whites) comprise the largest racial group at 87.0%, followed by American Indians at 4.7%. As far as ethnicity, a large percentage (29.6%) is of Hispanic or Latino heritage.

Dialysis Patients and Facilities in Arizona:
There were 98 Medicare-certified facilities providing dialysis services in Arizona at the end of 2007. Two new dialysis units opened in Arizona in 2007 and one closed.

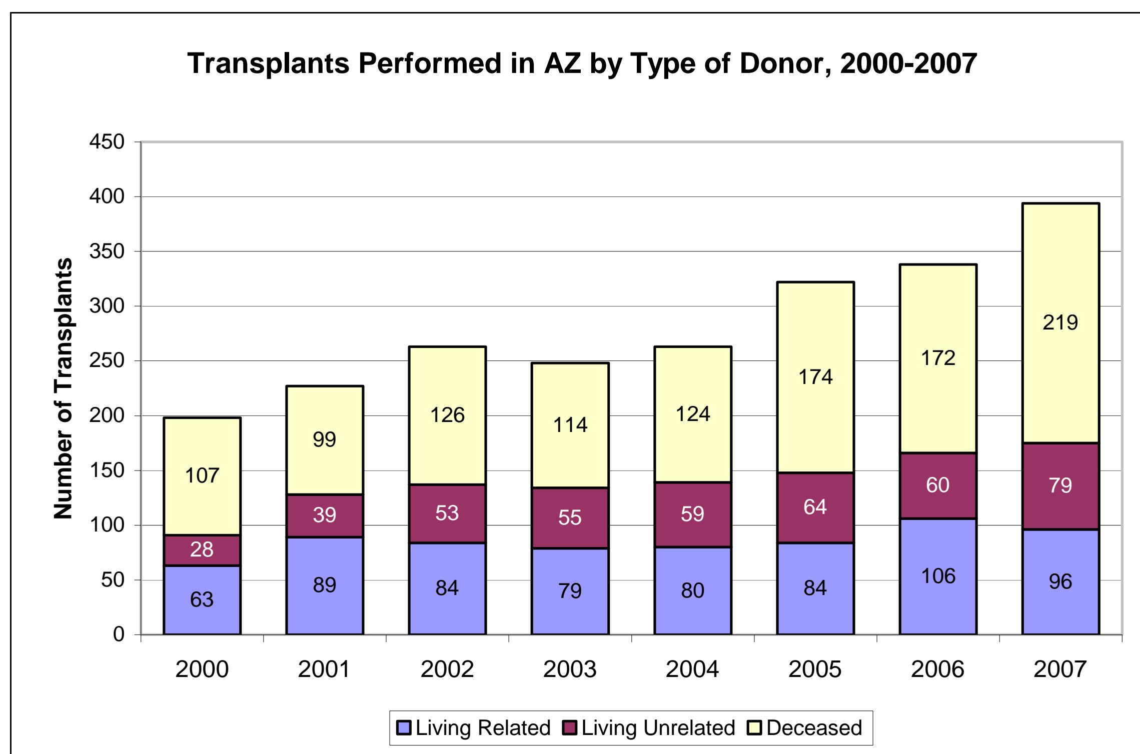
Facilities in Arizona also provided dialysis (usually home care) for patients living in California and New Mexico.

Time Trend of Arizona Patient Population and Facilities
2000-2007



	2000	2001	2002	2003	2004	2005	2006	2007
Prevalence	4887	5150	5347	5621	5858	6182	6479	6747
(%) Change	6.3%	5.4%	3.8%	5.1%	4.2%	5.5%	4.8%	4.1%
Incidence	1715	1813	1819	1884	1991	1976	2071	2079
(%) Change	3.1%	5.7%	0.3%	3.6%	5.7%	-0.8%	4.8%	0.4%
Dialysis Deaths	1158	1267	1357	1331	1389	1342	1332	1272
(%) Change	3.1%	9.4%	7.1%	-1.9%	4.4%	-3.4%	-0.7%	-4.5%
Facilities	82	86	86	88	92	96	97	98
(%) Change	5.1%	4.9%	0.0%	2.3%	4.5%	4.3%	1.0%	1.0%

Transplantation in Arizona:
There were four active transplant facilities in Arizona- one in Tucson and three in the Phoenix metropolitan area- performing 394 renal transplants in 2007. Of those transplants, 96 (24.4%) were from living related donors, 79 (20.0%) from living unrelated donors, and 219 (55.6%) from deceased donors. The table below illustrates Arizona renal transplants by donor type for the years 2000-2007.



Colorado

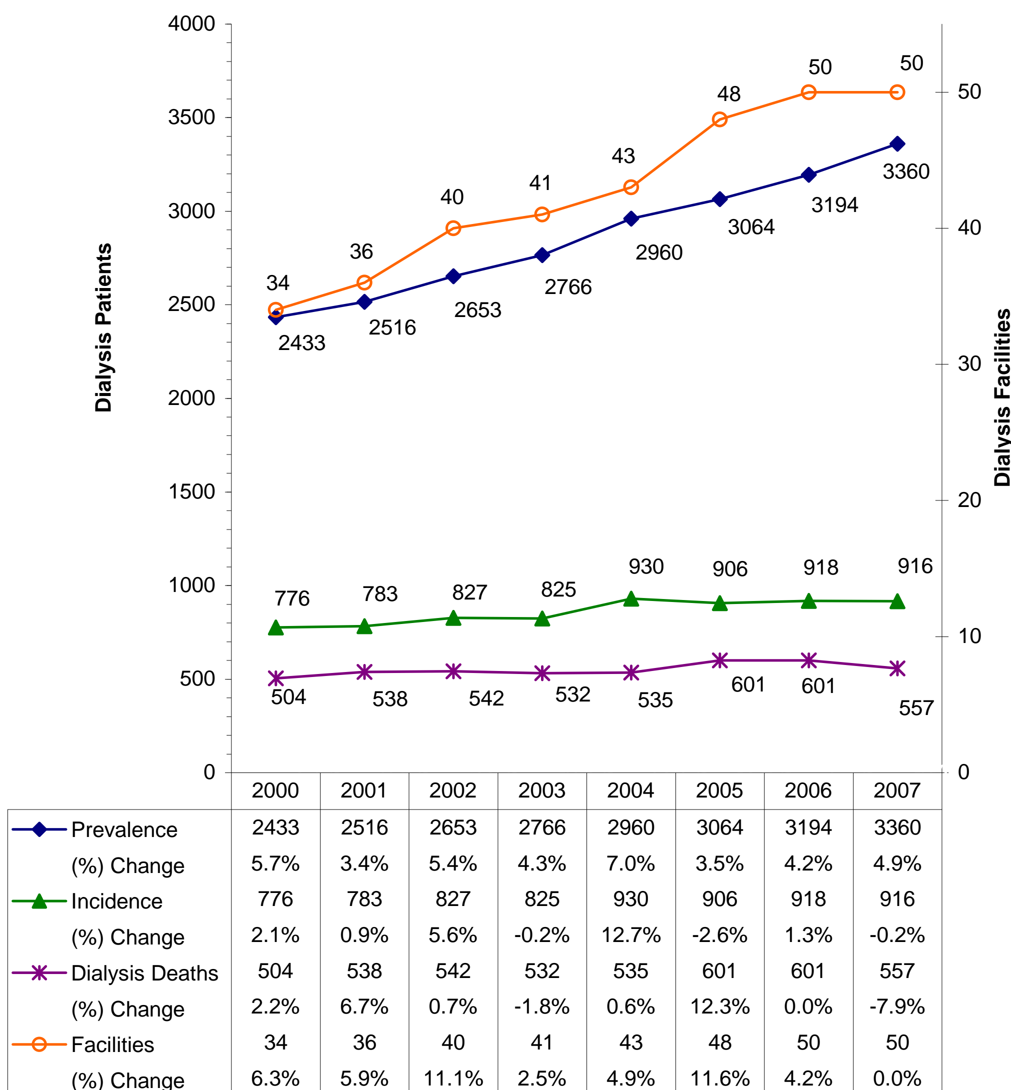
Colorado is the eighth largest state in the country, extending 387 miles east to west and 276 miles north to south, with an area of 103,718 square miles. The main feature of the state's geography is the Continental Divide, extending northeast to southwest and roughly bisecting Colorado into the eastern and western slopes. The state is bounded by Wyoming, Utah, New Mexico, Oklahoma, Kansas, and Nebraska. In the time period of 2000 to 2007, Colorado was the 8th fastest growing state in the nation with an 11.5% population change. Colorado was ranked 22nd in population by 2007 estimates. Eighty-seven percent of the population lives in metropolitan areas, nearly all in an 11-county urban corridor along the eastern edge of the Continental Divide, which includes the cities of Boulder, Denver, Colorado Springs, and Pueblo.

The other areas of the state are primarily rural, with agriculture, tourism, and mining being the major types of economic activities. Access to water is a factor that limits growth of eastern-slope communities. Air quality is an environmental problem in the urban areas of the eastern slope. The topography varies from semi-arid plains to high-mountain ranges. Climate and topography combine to make travel and accessibility

difficult in sparsely populated, rural areas of the western slope. Metropolitan Denver is a major health-care referral center for Colorado and its neighboring states.

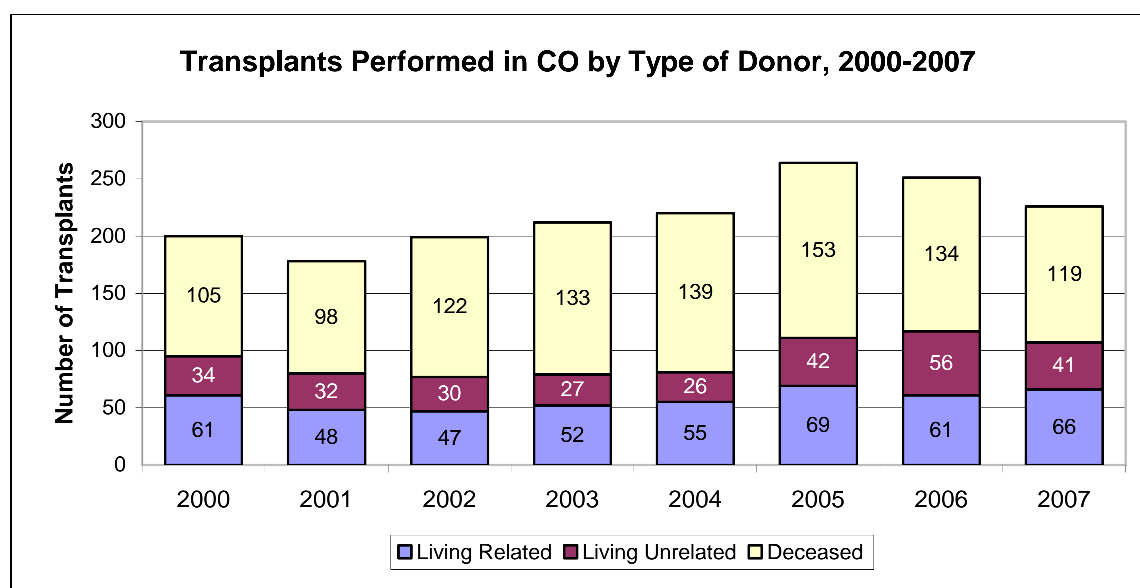
Dialysis Patients and Facilities in Colorado:
There were 50 Medicare-certified dialysis facilities in Colorado as of December 31, 2007. In 2007 there were no new dialysis units opened and none closed.

The majority of the patients receiving dialysis and transplant services are state residents. Additional transplant and peritoneal dialysis patients travel to Colorado from Wyoming, Nebraska, Arizona, Missouri, Montana, New Mexico, South Dakota, North Dakota, and Kansas.



	2000	2001	2002	2003	2004	2005	2006	2007
Prevalence	2433	2516	2653	2766	2960	3064	3194	3360
(%) Change	5.7%	3.4%	5.4%	4.3%	7.0%	3.5%	4.2%	4.9%
Incidence	776	783	827	825	930	906	918	916
(%) Change	2.1%	0.9%	5.6%	-0.2%	12.7%	-2.6%	1.3%	-0.2%
Dialysis Deaths	504	538	542	532	535	601	601	557
(%) Change	2.2%	6.7%	0.7%	-1.8%	0.6%	12.3%	0.0%	-7.9%
Facilities	34	36	40	41	43	48	50	50
(%) Change	6.3%	5.9%	11.1%	2.5%	4.9%	11.6%	4.2%	0.0%

Transplantation in Colorado:
There are four transplant centers in Colorado, all located in the Denver metropolitan area. There were 226 renal transplants performed in Colorado during 2007. Of these, 66 (29.2%) were from living related donors, 41 (18.1%) from living unrelated donors, and 119 (52.7%) from deceased donors. The following table illustrates Colorado renal transplants by donor type for the years 2000 through 2007.

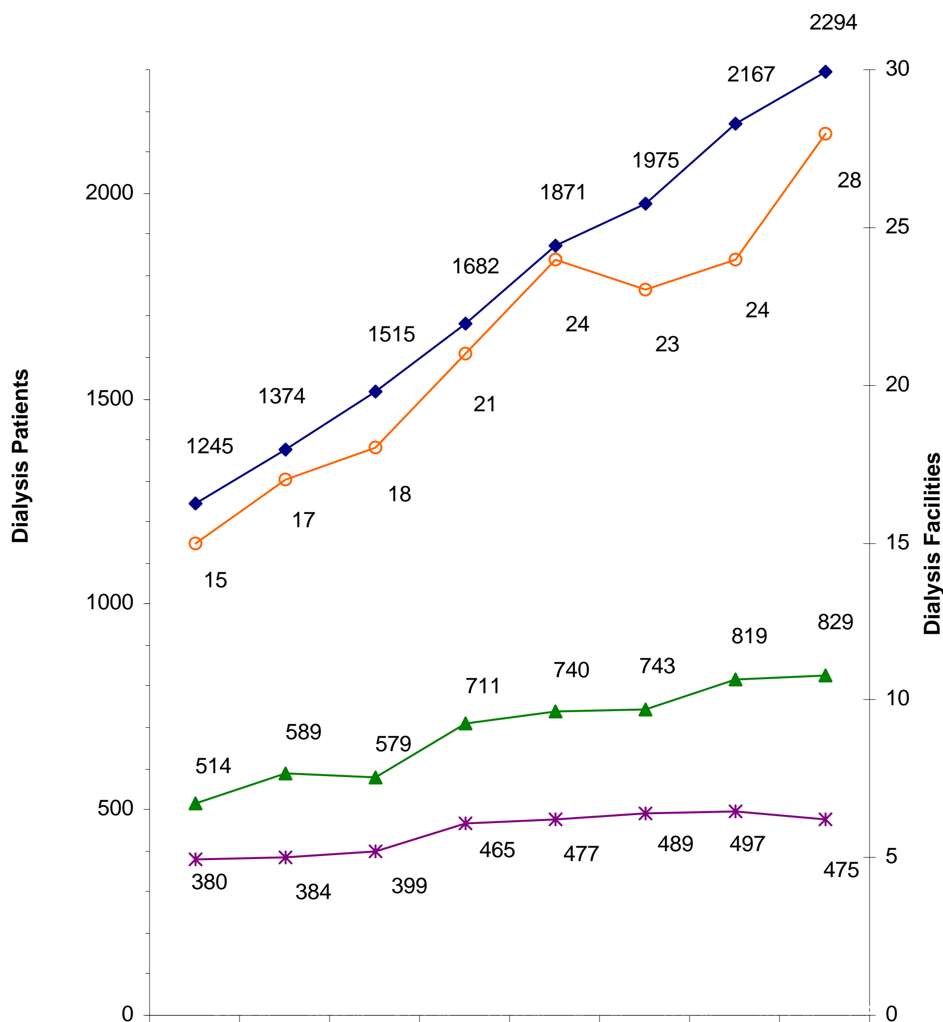


Nevada

Nevada is the seventh largest state, with an area of 109,826 square miles. The federal government owns 84.5% of the land. Eighty-eight percent of the population is urban, mostly concentrated around two urban areas: Clark County SMSA (Las Vegas) and Washoe SMSA (Reno). From 2000 to 2007, Nevada was the fastest growing state in the nation (22.1% gain in population, compared to the next largest percent gain of 19.1% in Arizona). The population density of the state remains low at 22 persons per square mile. The growth has come from migration rather than births. Mountains and high desert characterize the topography. Nevada ranked 35th in population as of 2007.

Dialysis Patients and Facilities in Nevada:
There were a total of 28 Medicare-certified dialysis facilities in Nevada as of December 31, 2007. Four new dialysis units opened in Nevada in 2007.

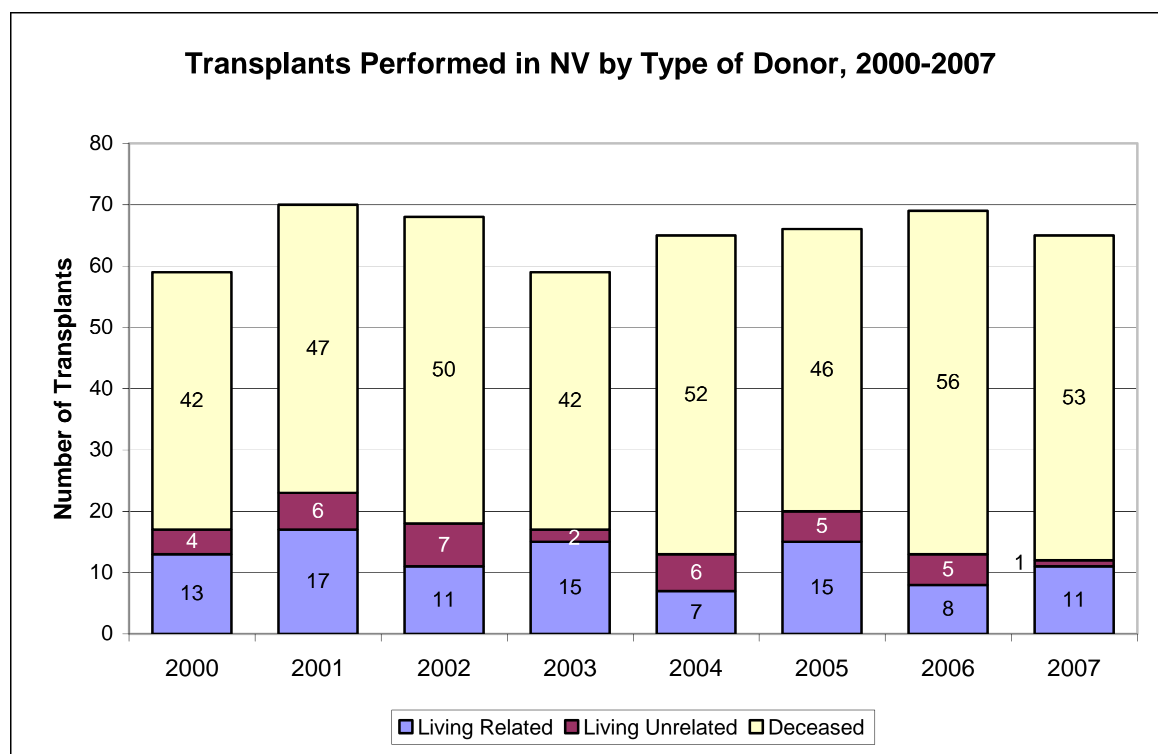
Time Trend of Nevada Patient Population and Facilities
2000-2007



	2000	2001	2002	2003	2004	2005	2006	2007
Prevalence	1245	1374	1515	1682	1871	1975	2167	2294
(%) Change	6.0%	10.4%	10.3%	11.0%	11.2%	5.6%	9.7%	5.9%
Incidence	514	589	579	711	740	743	819	829
(%) Change	-1.9%	14.6%	-1.7%	22.8%	4.1%	0.4%	10.2%	1.2%
Dialysis Deaths	380	384	399	465	477	489	497	475
(%) Change	5.3%	1.1%	3.9%	16.5%	2.6%	2.5%	1.6%	-4.4%
Facilities	15	17	18	21	24	23	24	28
(%) Change	25.0%	13.3%	5.9%	16.7%	14.3%	-4.2%	4.3%	16.7%

Transplantation in Nevada:
Nevada has two active transplant programs. Patients in Nevada awaiting transplant also go to California, Arizona, or Utah for transplant procedures.

There were 65 renal transplants performed in Nevada during 2007. Of these, 11 (16.9%) were from living related donors, one (1.5%) from a living unrelated donor, and 53 (81.5%) from deceased donors. The following table illustrates renal transplants performed in Nevada by donor type for the years 2000-2007.

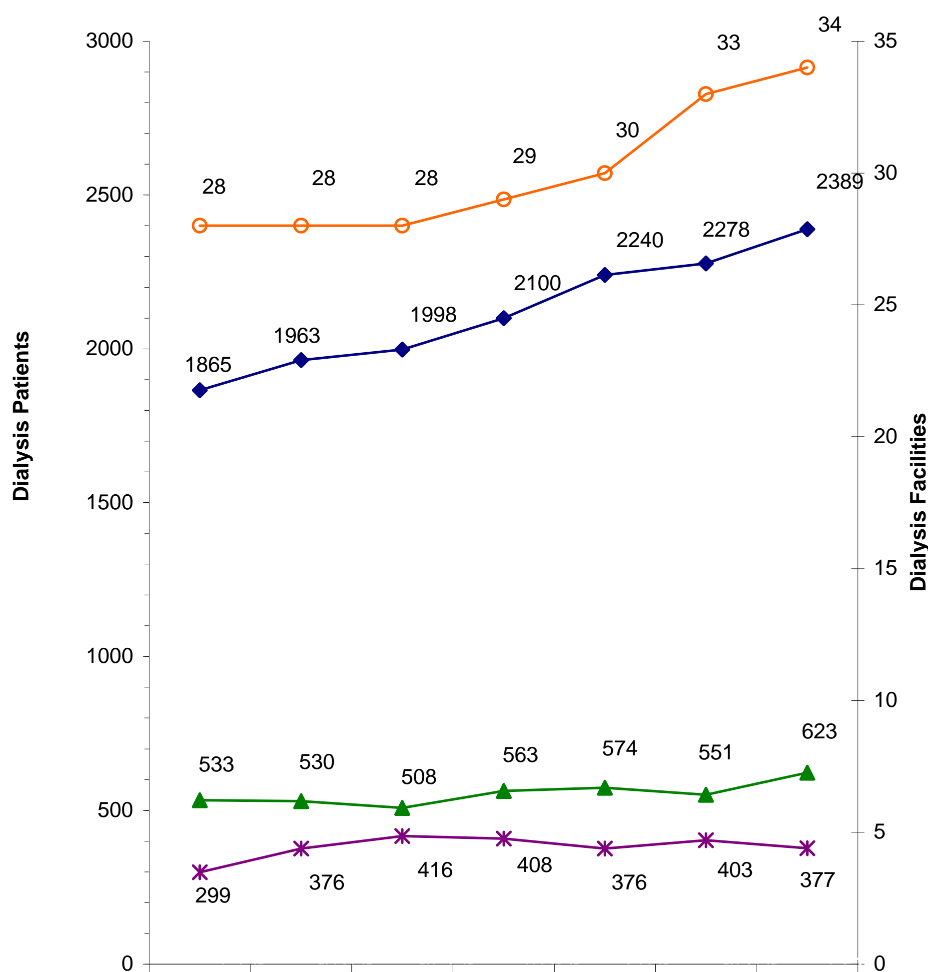


New Mexico

New Mexico is the fifth largest state in the country, with an area of 121,356 square miles, and ranks 36th in population. Forty-two percent of the land is federally owned. Ranching, nuclear energy research, and mining are major components of the economy; one out of four workers in New Mexico works for the federal government. Plains in the east and mountains and high desert in the west characterize the topography. Elevations range from 2,842 to 13,161 feet above sea level. The northwest portion of the state contains vast reservoirs of gas and oil.

From 2000 to 2007, New Mexico was the 16th fastest growing state in the nation (7.5% gain in population). Sixty-five percent of the population is considered urban. Transportation is mainly by private automobile or bus. Distances between population areas vary from 50 to over 300 miles. Settled in 1601, New Mexico has a long history of settlement by diverse cultural groups. New Mexico has one of the highest rates of poverty among the 50 states.

Dialysis Patients and Facilities in New Mexico:
With two new facilities and one closure in 2007, there were a total of 34 Medicare-certified dialysis facilities in New Mexico on December 31, 2007.

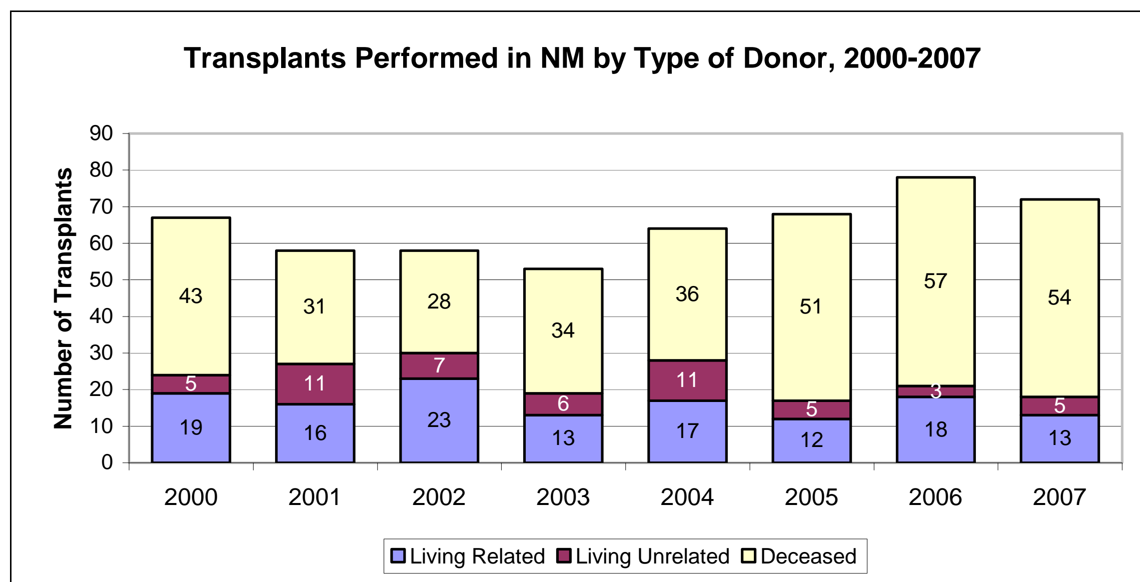


	2000	2001	2002	2003	2004	2005	2006
Prevalence	1865	1963	1998	2100	2240	2278	2389
(%) Change	11.5%	5.3%	1.8%	5.1%	6.7%	1.7%	4.9%
Incidence	533	530	508	563	574	551	623
(%) Change	1.1%	-0.6%	-4.2%	10.8%	2.0%	-4.0%	13.1%
Dialysis Deaths	299	376	416	408	376	403	377
(%) Change	-13.3%	25.8%	10.6%	-1.9%	-7.8%	7.2%	-6.5%
Facilities	28	28	28	29	30	33	34
(%) Change	7.7%	0.0%	0.0%	3.6%	3.4%	10.0%	3.0%

Transplantation in New Mexico:

There are two transplant centers in New Mexico, both located in Albuquerque. Between them they performed 72 renal transplants during 2007. Of those, 13 (18.1%) were from living related donors, five (6.9%) from living unrelated donors, and 54 (75.0%) from deceased donors.

The following table illustrates renal transplants performed in New Mexico transplant facilities by donor type for the years 2000 through 2007.



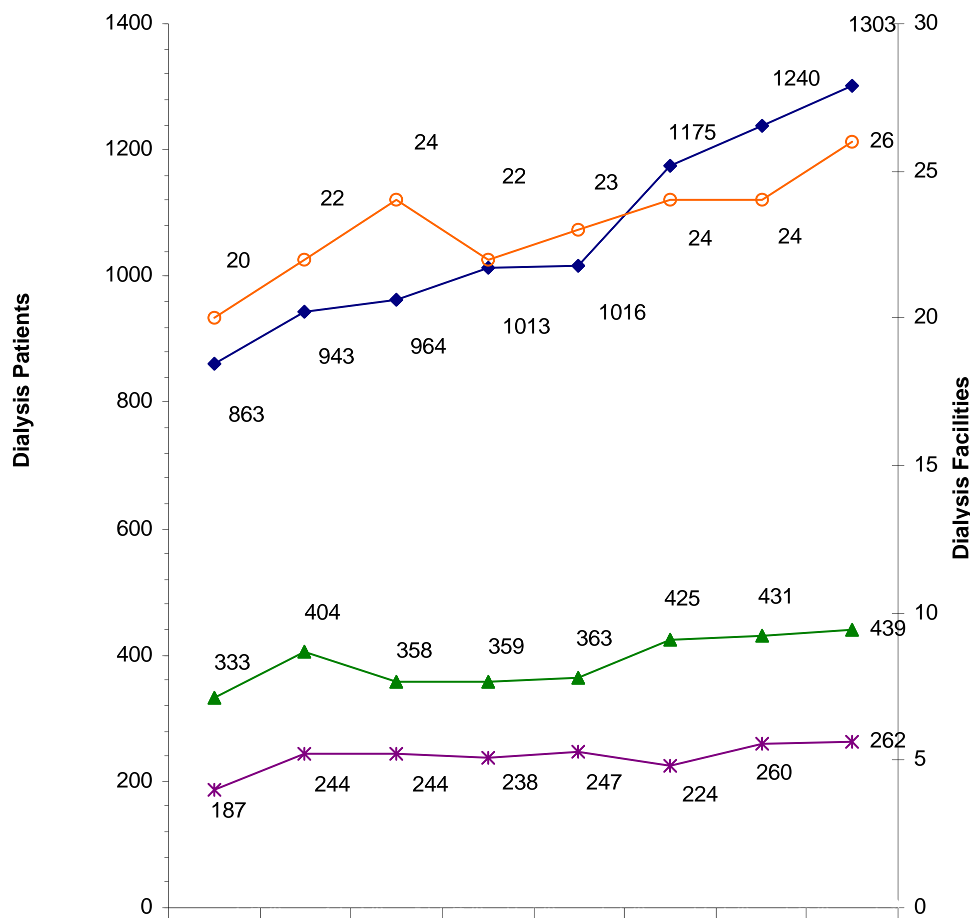
Utah

Utah, the beehive state, has 82,114 square miles within its borders, ranking 13th in total area and 34th in population. The state is bounded by Nevada, Idaho, Wyoming, Colorado, and Arizona. Approximately 60% of state residents are adherents of the Church of Jesus Christ of Latter-day Saints (LDS Church), which has a religious prohibition of tobacco and alcohol use. Three-quarters of the population live along the western slope of the Wasatch Mountains, called the Wasatch Front Metropolitan area. Geographically, Utah is comprised of mountains and desert.

In Utah, 57.5% of the land is federally owned. Areas classified as metropolitan contain 76% of the population. From 2000 to 2007, Utah was the third fastest growing state in the nation (15.6% gain in population). This growth is attributed to the high birth rate (90.6 births per 1,000 women 15-44, the highest in the nation), low mortality rate (7.9 deaths per 1,000 in 2004, the seventh lowest in the nation), and significant net in-migration.

Dialysis Patients and Facilities in Utah:
In 2007 two new dialysis units opened in the state of Utah for a total of 26 Medicare-certified dialysis facilities in Utah as of December 31, 2007.

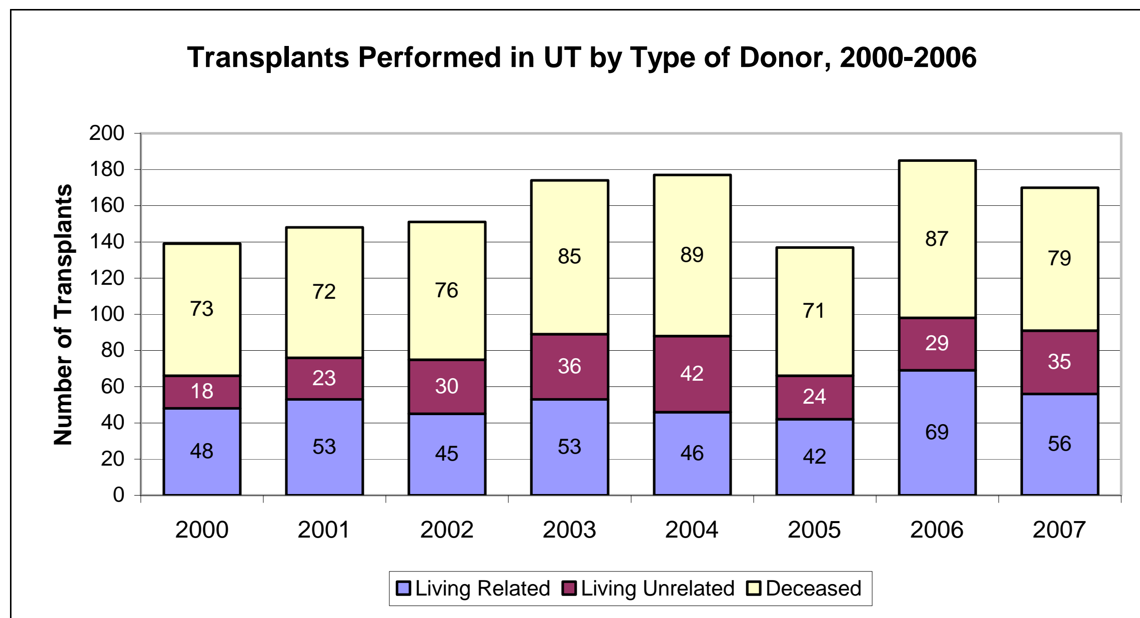
Time Trend of Utah Patient Population and Facilities
2000-2007



	2000	2001	2002	2003	2004	2005	2006	2007
Prevalence	863	943	964	1013	1016	1175	1240	1303
(%) Change	10.6%	9.3%	2.2%	5.1%	0.3%	15.6%	5.5%	5.1%
Incidence	333	404	358	359	363	425	431	439
(%) Change	7.4%	21.3%	-11.4%	0.3%	1.1%	17.1%	1.4%	1.9%
Dialysis Deaths	187	244	244	238	247	224	260	262
(%) Change	-4.6%	30.5%	0.0%	-2.5%	3.8%	-9.3%	16.1%	0.8%
Facilities	20	22	24	22	23	24	24	26
(%) Change	11.1%	10.0%	9.1%	-8.3%	4.5%	4.3%	0.0%	7.7%

Transplantation in Utah:
There are two transplant centers in Utah, both in Salt Lake City. There were 170 renal transplants performed in Utah during 2007. Thirty-three percent (56) of transplants in Utah were from living related donors, 20.6% (35) were from living unrelated donors, and 46.4% (79) of transplanted kidneys came from deceased donors.

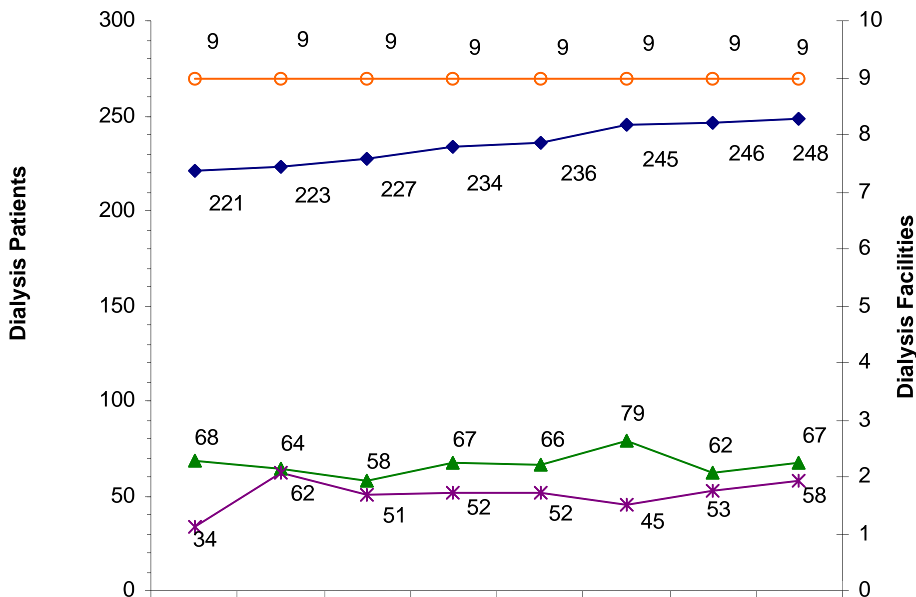
The following table illustrates renal transplants at Utah transplant facilities by donor type 2000 through 2007.



Wyoming

Wyoming is the ninth largest state, with an area of 97,100 square miles. It is, however, ranked 51st in population. The state is characterized by sparsely populated rural or wilderness areas with a few urbanized population concentrations. Only 29% of the population lives in urban areas. The topography varies from semi-arid grasslands to high mountain ranges. Climate and topography combine to make travel times and accessibility difficult (and sometimes impossible). Principle economic activity involves agriculture, mining, and tourism.

Dialysis Patients and Facilities in Wyoming:
There were nine Medicare-certified dialysis facilities in Wyoming as of December 31, 2007.



	2000	2001	2002	2003	2004	2005	2006	2007
Prevalence	221	223	227	234	236	245	246	248
(%) Change	22.1%	0.9%	1.8%	3.1%	0.9%	3.8%	0.4%	0.8%
Incidence	68	64	58	67	66	79	62	67
(%) Change	-6.9%	-5.9%	-9.4%	15.5%	-1.5%	19.7%	-21.5%	8.1%
Dialysis Deaths	34	62	51	52	52	45	53	58
(%) Change	-17.1%	82.4%	-17.7%	2.0%	0.0%	-13.5%	17.8%	9.4%
Facilities	9	9	9	9	9	9	9	9
(%) Change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Transplantation in Wyoming:
There are no transplant centers in the state of Wyoming. Transplant patients are generally referred to transplant programs in Colorado and Utah.

B. Network Structure

The Intermountain End-Stage Renal Disease Network, Inc. (also known as ESRD Network #15) service area covers the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. The Network carried out all administrative activities required by its CMS contract as well as those activities required to operate as a Colorado non-profit corporation. These activities included, but were not limited to the following:

- Maintained a Board of Directors (BOD) comprised of professionals and at least one patient as specified in the current Network Statement of Work (SOW). The Board of Directors holds ultimate responsibility for the effective functioning of the Network;

- Maintained a Network Council comprised of professionals representing renal dialysis and transplant facilities located in the Network and kept Council members informed on Network activities;

- Maintained a Medical Review Board (MRB) with a membership that includes at least one patient representative in addition to physicians, nurses, social workers, administrators and renal dietitians engaged in treatment relating to end-stage renal disease. The Network #15 Medical Review Board continued its activities and programs related to the quality and appropriateness of care;

- Supported a Patient Leadership Committee comprising patients who represent various regions of the service area to provide input to the Network and its Boards on the concerns and needs of patients; and,

- Maintained its corporate status as "qualified to do business in other states" in Arizona, Nevada, New Mexico, Utah, and Wyoming. The required corporate reports and forms were submitted to the appropriate state agencies.

C. Network Staff

The Network Executive Director supervises the Network staff members and is accountable to the Board of Directors for the overall performance and activities of the Network staff. Each employee has a primary area of responsibility. These responsibilities fall within four major areas: Administration, Quality Improvement, Data Management, and Patient Services. In 2007, the employees were:

- Darlene J. Rodgers, BSN, RN, CNN, CPHQ , Executive Director
  Position Summary: Under the general direction of the Intermountain End-Stage Renal Disease Network, Inc. Board of Directors; administers, implements and evaluates the programs and activities of the Intermountain ESRD Network, Inc. in accordance with the CMS contract requirements.

- Karen L. Strott, BSN, RN, CPHQ Director, Quality Improvement
  Position Summary: Under the general supervision of the Executive Director, this individual assumes the responsibilities for the Network Quality Improvement Program. Responsible for the development, implementation and evaluation of Continuous Quality Improvement (CQI) activities for dialysis facilities in Network #15's six state areas per contractual agreement with CMS.

- Matthew Howard, Director, Information Systems
  Position Summary: Under the general supervision of the Executive Director, this individual assumes responsibility for all day-to-day data collection activities relating to CMS data deliverables, serves as primary Network point of contact for the CROWN (Consolidated Renal Operations in a Web-enabled Network) program, and serves, as the liaison between CMS and dialysis facilities for CMS required data activities. This individual also provides data analytical support to Quality Improvement, Patient Services, and Administration; acts as the Network contact for the technical needs of the administration of the servers, software, and workstations; and serves as primary contact for all VISION/Quality Net Exchange issues between facilities and the Network.

- Barbara K. Campbell, MSW, ACSW, LSW, Director, Patient Services
  Position Summary: Under the general supervision of the Executive Director, the Director of Patient Services develops, implements, and evaluates all programs relating to ESRD patient services in the Intermountain ESRD Network #15 six-state area, per contractual agreement with CMS. This individual is responsible for the complaint and grievance process utilizing CMS protocol, as well as for the development of programs and QI activities to impact the quality of life for ESRD patients.

- Robin Bender, RN, BSN, CNN, Quality Improvement Coordinator
  Position Summary: Under general supervision of the Executive Director and the Director of Quality Improvement, assists the Director of Quality Improvement in the management the Network's quality improvement activities and provide technical support to the Network #15 nephrology community.

- Lynne D. Wright, BSN, RN, CNN, Special Studies Nurse
  Position Summary: Under general supervision of the Executive Director and the Director of Quality Improvement, this individual plans, revises, supports, monitors, and coordinates Network Quality Improvement Projects as well as facilitates completion of special studies and projects from various agencies in the Network's six state area.

- Deb Borman, MSW, LCSW, Patient Services Coordinator
  Position Summary: Under the general supervision of the Executive Director and the Director of Patient Services, this individual assists the Director of Patient Services in the development, implementation, and evaluation of all programs relating to ESRD patient services Network #15. This individual assists the

Director of Patient Services in the complaint and grievance process utilizing CMS protocol, and is active in the development of programs and QI activities to impact the quality of life for ESRD patients.

- Karolyn Forbes, Office Manager
  Position Summary: Under the general supervision of the Executive Director, maintains financial records and files. This individual prepares financial statements and reports and supports staff in all team areas of the Network with a variety of tasks. This individual maintains office supplies and equipment. Additionally, this individual provides support to the IT staff as a backup/assistant. This individual supervises and establishes work procedures for part-time temporary clerical staff and assists with Human Resources components of the organization.

- Betty Wyant, Administrative Assistant
  Position Summary: Under the general supervision of the Executive Director, assists Executive Director and Director of Quality Improvement as needed and supports other staff members in a variety of tasks including clerical support, maintenance of files, and database support. This individual is responsible for answering incoming telephone calls and opening and distributing mail.

- Drew Lifset, Data Assistant for Quality Improvement
  Position Summary: Under the general supervision of the Executive Director and the Director of Quality Improvement, this individual works closely with the data and quality improvement teams to assist with a variety of data needs, including data input, data integrity analysis and interface with the Network facility providers.

- Cynthia Nelson, Information, Information Savant
  Position Summary: Under the general supervision of the Executive Director and the Director of Information Systems, this individual works with the Information Systems team to oversee the flow of data, to update and maintain the patient database, to promote facility/Network communication, and to detail processes pertaining to the transmission of data.

- Virginia Nelson, Information Systems Assistant/Communications Coordinator
  Position Summary: Under the general supervision of the Executive Director and the Director of Information Systems, this individual assists in generating and editing the Network publications, maintains and updates Network website, works with the Director of Information Systems to update and maintain patient database, assists in processing all CMS required forms and assists in general office duties.

D. Board of Directors

Network #15 is governed by a Board of Directors, which is comprised of representatives from the Network #15 and Network #17 area and includes patient representation. The following list shows the Board of Directors membership by state and professional category as of December 31, 2007:

- Nephrologist — Arizona
- ESRD Administrator — Arizona
- Nephrologist — Colorado
- Nephrologist — Colorado
- Nephrologist — Nevada
- ESRD Nurse — Nevada
- Nephrologist — New Mexico
- Transplant Nephrologist — New Mexico
- ESRD Nurse — Utah
- Patient — Utah
- ESRD Dietitian — Colorado
- Interventional Nephrologist — California

E. Committees

Medical Review Board (MRB)

The Medical Review Board is a committee whose membership is qualified by education, experience, and position to evaluate the quality and appropriateness of care delivered to ESRD patients. The MRB serves as an advisory panel to the Network Organization on all matters relating to the evaluation of the quality and appropriateness of care. The MRB is responsible for the development and/or revision of all criteria and standards. The MRB committee membership as of December 31, 2007 included:

- *Arizona*:
  - Interventional Nephrologist
  - Nephrology Nurse/ Administrator
  - Nephrology Social Worker
  - Nephrologist
  - Nephrologist
  - Patient
  - Pediatric Nephrologist
- *Colorado:*
  - Nephrologist
  - Nephrologist
  - Nephrology Dietitian
  - Nephrology Nurse/ Nurse Educator
  - Transplant Surgeon
- *New Mexico:*
  - Nephrologist

Nephrologist
Nephrology Advanced Practice Nurse

- *Nevada:*
  Nephrologist
- *Utah:*
  Nephrologist
  Nephrologist
  Patient
- *Wyoming:*
  Nephrologist

Patient Leadership Committee (PLC)

This committee is comprised of patient representatives from the Board of Directors and the Medical Review Board, as well as other patient representatives from the Network area, and works in conjunction with the Director of Patient Services and other Network staff members. In 2006 the name was changed to the Patient Leadership Committee. The purpose of the committee is to bring patient concerns to the attention of the Network and to serve in an advisory capacity to the Board of Directors on issues where patient input is appropriate. The Committee conducts its business by mail, e-mail, phone, and in person as necessary. One patient serves on the Board of Directors, and two on the Medical Review Board. In 2007 the members of this committee were from the following states:

- Arizona
- Nevada
- Utah

Grievance Committee

This committee is comprised of members of the MRB and is responsible for, in conjunction with the Director of Patient Services, the Network grievance resolution process. It is appointed and activated as necessary upon submission of a formal grievance involving clinical or medical matters requiring education, experience, and/or expertise beyond that of Network staff. Care is taken to appoint Medical Review Board members with experience relevant to the grievance, and strict conflict of interest procedures are observed. Any individual who has a financial, professional or personal involvement with the beneficiary or provider, or who resides in or practices in the same state, is excluded from participation on the Grievance Committee. The Grievance Committee consists of, at minimum, a chairperson and two other members.

Network Council

The Network Council is composed of members from renal dialysis and transplant

providers that are located in the six-state area of Network #15. In addition, the patient members of the Board of Directors and Medical Review Board are considered Council members. The Network Council meets the statutory requirements of 1881 (c) of the Social Security Act. The Network Council serves as a liaison between the Network and its provider membership. Every renal facility/provider is represented on the Council. At its September, 1997 meeting, the Board of Directors redefined Council membership. Instead of each facility appointing a representative, the Council consists of the Medical Director, Administrator, Head Nurse, Social Worker and Dietitian from each Network facility. All of these individuals are considered Network Council Representatives and receive general mailings. Additionally, each professional category receives mailings relevant to that area of practice.

F. Emergency Preparedness for the Network Organization

Given the increased concern about potential disasters, including an outbreak of the Pandemic Influenza, Network #15 began a disaster preparedness plan for the Network organization in 2006 and has added to and made revisions to the plan throughout 2007. This plan is an extension of the Business Continuity and Contingency Plan (BCCP) required by CMS and the work begun by the Western Consortium of ESRD Networks (Networks #15, #16, #17 and #18) Disaster Collaboration in July 2006. The plan speaks directly to the Network functions and how work within the Network office can be completed in the case of a disaster. The plan also encourages individual employee preparedness for a disaster. The plan is reviewed annually and revised as needed. Disaster preparedness activities for the Network facilities will be discussed later in this document.

III. CMS END-STAGE RENAL DISEASE NETWORK PROGRAM STRATEGIC GOALS

A. Introduction

Beginning on July 1, 2006, the Networks entered into a new three-year SOW with the Centers for Medicare & Medicaid Services (CMS). The strategic goals described in this report are the goals as stated in the 2006-2009 SOW. In accordance with the legislative mandate for the ESRD Network program; to assist CMS in meeting Agency goals and in keeping with sound medical practice, the strategic goals of the ESRD Network Program (2006-2009) are to:

1. Improve the quality and safety of dialysis related services provided for individuals with ESRD;
2. Improve the independence, quality of life and rehabilitation (to the extent possible) of individuals with ESRD through transplantation, use of self-care modalities (e.g., peritoneal dialysis, home hemodialysis), and in-center self care, as medically appropriate, through the end of life;
3. Improve patient perception of care and experience of care, and resolve patient's complaints and grievances;
4. Improve collaboration with providers to ensure achievement of the goals through the most efficient and effective means possible, with recognition of the differences among providers (e.g., independent, hospital-based, member of a group, affiliate of an organization, etc.) and the associated possibilities/capabilities; and,
5. Improve the collection, reliability, timeliness and use of data to measure processes of care and outcomes; maintain a Patient Registry; and to support the ESRD Network Program.

The Health Care Quality Improvement Program (HCQIP) for the ESRD Network Program mission supports achievement of the strategic goals by assuring the Institute of Medicine aims, as they relate to individuals with ESRD, ensure that care delivery is patient-centered, safe, effective, efficient, equitable, and timely.

B. Improve the Quality and Safety of Dialysis Related Services Provided for Individuals with ESRD

As defined in the SOW, the mission of the CMS HCQIP is to promote the quality, effectiveness, and efficiency of services to Medicare beneficiaries by strengthening the community of those committed to monitoring and improving care. With the start of the 2006-2009 SOW on July 1, 2006, the Networks were required to implement a Quality Improvement Work Plan (QIWP). This plan details the quality improvement activities through the contract year and is used as a guide to the current QI activities. The MRB assisted with the QIWP development and is instrumental in monitoring the progress through the year.

During 2007, Network #15 defined Quality Improvement Projects (QIPs); and through the work of the Medical Review Board and in partnership with Network renal providers has directed or participated in the following projects:

1. *"Fistula First" Quality Improvement Initiative*

In the SOW issued in June 2003 the Networks moved from methodologically prescribed QIPs with significant CMS oversight to autonomous development of effective facility-based rapid-cycle improvement initiatives. The Institute for Healthcare Improvement (IHI) was contracted to work with CMS, Networks and dialysis facilities/corporations to develop a collaborative approach to prioritize a quality improvement topic, identify and "package" effective approaches for improvement, assist in the design of an approach that maximizes the "spread" and "adoption" of effective solutions, and "coach" collaborative teams.

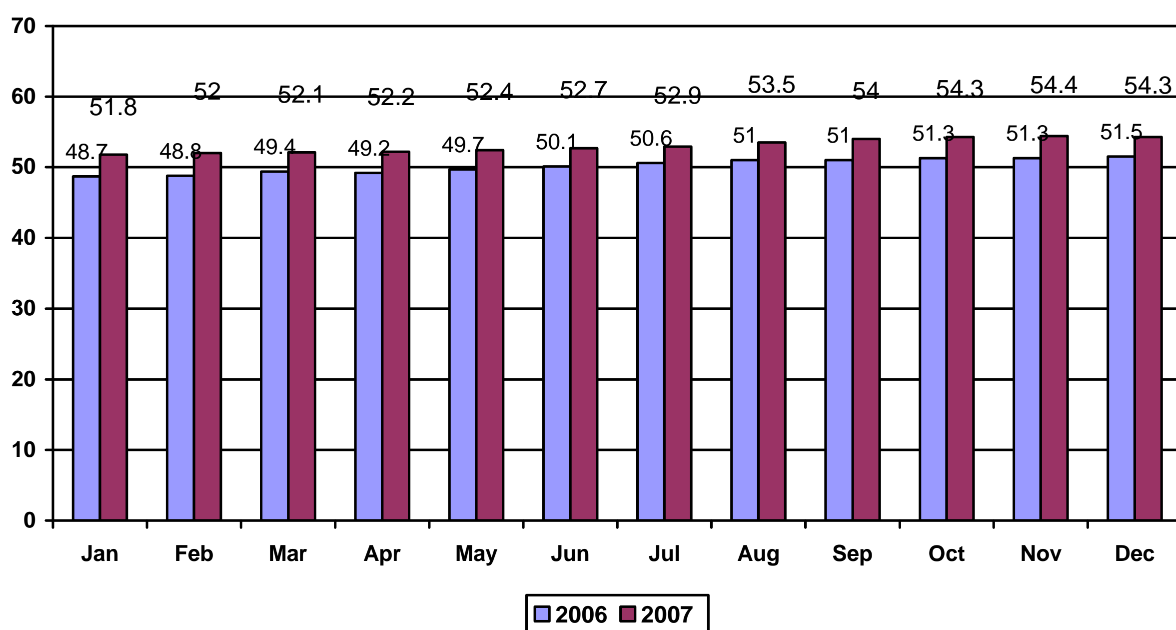
Since the 2003-2006 SOW, all Networks were required to develop and implement a quality improvement project aimed at increasing fistulas within their Networks. This work continued into the 2006-2009 SOW. The original "Fistula First" project was re-named the "Fistula First Breakthrough Initiative." This portion of the Network SOW is performance-based with the target for performance developed by CMS. The target prescribed for Network #15 by the end of the first option contract year, which began on July 1, 2007 and ends on June 30, 2008 is 54.9%. As of December 2007, the prevalent AVF rate for Network #15 was reported as 54.3% utilizing the CMS Fistula First Dashboard. During 2007, the Fistula First Initiative was the primary focus of many of the Network's QI activities.

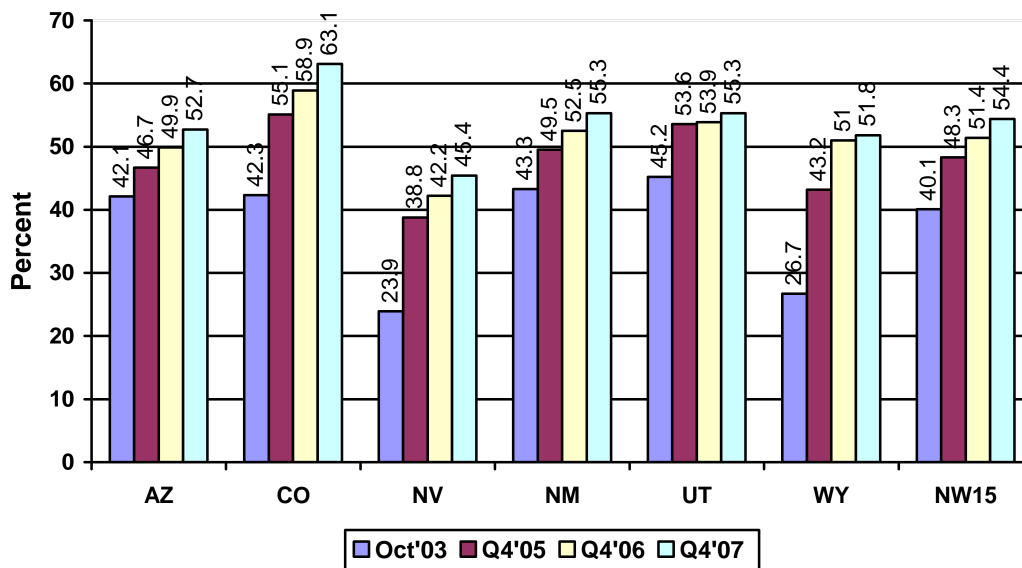
Data continued to be downloaded from the large dialysis organizations (LDOs) via SIMS each month throughout 2006. A list of current patients was mailed to independent facilities monthly and staff members at these facilities either submitted aggregate data to Network #15 using the computerized tool or a paper form. Network staff then manually entered the aggregate information into the Fistula First database.

Network #15 continued to produce a quarterly summary report during each quarter of 2007, as well as a report containing facility-specific fistula use data with a calculated facility median. The Network facility-specific report allowed facilities that have on-going vascular access initiatives to better assess whether specific interventions have had an effect on their rates. That report along with the quarterly summary and monthly facility-specific reports generated through SIMS, were disseminated to each Facility Administrator and Medical Director on a quarterly basis. The quarterly summary reports were also mailed to project partners involved in other aspects of the project (e.g., surgeons in Network #15's six-state region and the appropriate Indian Health Service participants). The

Network QI staff continued to work with facilities and physicians who are in need of help with their Fistula First Activities.

Facilities in Network #15 have used multiple strategies to increase their AVF rates. There is not "one-way" to make improvements because facilities face many different vascular access challenges.
Prevalent AVF rate improvements across the provider types continued to be monitored throughout 2007.





Network #15 staff members have conducted numerous phone interviews to facilities to identify barriers that prevent the achievement of higher AVF use rates. Reasons for low AVF rates included, but were not limited to:

- Non-LDO facilities have less resources to spend on QI projects associated with VA than LDO groups yielding lower AVF use rates for independent facilities;
- Nurse Practitioners and Physician Assistants in AZ place CVCs in patients without ensuring follow-up appt. for permanent access placement (per dialysis facility personnel);
- Late referral of CKD patients to nephrologists and surgeons because of failure to identify CKD prior to Stage-5;
- Poor communication among disciplines regarding the desired access;
- Catheters are placed as a convenience to surgeons and nephrologists;
- Lack of permanent access plan when catheter or graft placed;
- Failure to recognize grafts/bridge grafts as an access option and;
- Poor follow-up/lack of a plan when newly diagnosed patients discharged from hospitals;
- Patients may not be given accurate, comprehensive information regarding their modality or access options;
- Some access centers might be promoting “catheter first” rather than “fistula first” for the initial vascular access.

The Network continued its educational efforts at the facility level in the form of cannulation workshops and discussions with dialysis facility personnel regarding QI endeavors. Requests for "On Course with Cannulation" workshops continued through the contract year. Network #15 staff offered resources and direct assistance to facilities to develop individual action plans to help improve their AVF rates. Corporations continued to provide enhanced cannulation training for dialysis facility staff. Corporations have a renewed "team approach" to vascular access placement and management that is enhancing the likelihood that a hemodialysis patient will receive a viable working AVF as a first access.
A *sample* of specific activities that have been undertaken in 2007 included:

- Each issue of the Network's professional newsletter, the *Intermountain Messenger* (IM) contains articles related to the Fistula First Initiative;
- Quarterly FF feedback reports were produced and mailed to Medical Directors, Facility Administrators and FF surgeons;
- The Network collected/developed/mailed the following FF materials for facilities:
  - FF manual data collection forms were generated each month, sent to independent facilities for completion, and Network staff subsequently entered data into the FF database.
  - Buttonhole educational materials were mailed to requesting facilities
- On September 13, 2007, the Network sponsored and helped coordinate the ANNA Presentation: *Assessment and Treatment of the Immature Fistula*, by Dr. Kaveh Kian from the Denver Nephrology/Colorado Renal Access and Imaging Center;
- The Network updated the Fistula First contacts in SIMS in order to obtain e-mail addresses for contacts at every facility;
- In February 2007, during the Southwest Nephrology conference, Network #15 staff presented two sessions related to Fistula First: The Director of Patient Services presented an in-service "Fistula First: Implications for Nephrology Social Work Practice" to social worker attendees and the Executive Director presented an update of the Fistula First Breakthrough Initiative;
- The *Learn and Earn* vascular access patient educational series, made up of a three-parts consisted of written information in both English and Spanish versions promoting A-V fistulas as the optimal vascular access. A one-page flyer with simple, bulleted information was distributed to all dialysis facility Head Nurses during this quarter with a request to disseminate to all hemodialysis patients. After reviewing the educational information, the patient was encouraged to fax or mail back the form as a contest entry for a prize for him/herself and his/her facility;
- Network #15 staff hosted a Network-wide conference call to review completion of the FF data collection form and how to use the information on the quarterly reports;
- The Network staff worked with three providers within a single geographic region whose prevalent AVF rates had lagged behind the remainder of

facilities within the state. The aggregate rate of prevalent AVFs increased 7.7 percentage points from 30.4% in January 2007 to 38.1% in December 2007. The remainder of the facilities in that state showed an improvement of 0.9 percentage points from 47.7% to 48.6% during the same timeframe;

- In November 2007, Network #15 staff traveled to Arizona to present a full-day educational offering. A portion of this event was focused on Fistula First. Additionally, the Network staff, in coordination with a LDO embarked on a Fistula First activity aimed at increasing incident AVF rates for patients admitted to their facilities. This activity will continue into 2008;
- The Network staff began working with nine providers, from one corporation, within a single geographic region whose prevalent AVF rates were significantly lower than the remainder of facilities within the state;
- Physician-specific reports for incident patients were developed for distribution to three groups of physicians in order to highlight the high numbers of patients who begin dialysis with a central venous catheter as their only access;
- State-specific reports for incident patients were developed for distribution to all Medical Directors at all facilities in Network #15;
- The Quality Improvement department provided "Fistula First Starter Kits" containing post-operative care instructions, a tourniquet, a gripper ball and an exercise booklet developed by Network #15, to requesting facilities during this calendar year;
- The Network sent a copy of the Fistula First Cannulation DVD, along with a stethoscope and stenosis monitoring resources to all non-LDO facilities during the fourth quarter of 2007;
- Network facilities participated in a buttonhole scan in conjunction with the FFBI project, the results of which were included in the National aggregate data reports;
- The Network website was regularly updated with new Fistula First resources as they became available;
- Network #15 continues to partner with numerous entities to promote the Fistula First Initiative.

During the second option year of the 2003-2006 SOW, the Network assisted in the organization of a coalition whose focus is Dialysis Access and Chronic Kidney Disease (DA/CKD). Throughout 2007, the Network continued to work with this coalition to focus on early identification of CKD patients and early access placement. Please see section III.E.6. for additional information on this collaborative effort.

The CMS Fistula First Breakthrough Initiative (FFBI) has had a positive impact on the Fistula First project during 2007. Network #15 has been an active participant with three staff members participating on national task groups. Through the collaboration of Surgeons, Interventional Radiologists, LDOs, independent facilities, Networks, payers, patient organizations, RPA, ANNA,

NANT, and USRDS an increase in prevalent AVF rates have been demonstrated throughout the country. Please see Appendix B for information related to the Fistula First Initiative.

2. *National Clinical Performance Measures Project*

In 1994, the Centers for Medicare & Medicaid Services initiated the ESRD Health Care Quality Improvement Program (HCQIP) to monitor and evaluate patterns of care and provide feedback to all ESRD providers. HCQIP is based on Continuous Quality Improvement (CQI) concepts. It has been proposed, and fostered by CMS, that the CQI model, utilizing a rapid-cycle methodology, is the best approach for ESRD Networks to take in guiding facilities toward quality care for their patients. In addition, CMS is responsible to the public for managing the financial resources it administers and assuring that an acceptable level of care is provided to ESRD beneficiaries. In order to provide feedback, CMS selected quantifiable clinical indicators, which could be measured easily to determine important aspects of dialysis care. Since the inception of HCQIP in 1994, CMS and the ESRD Networks have been committed to improving ESRD patient care and outcomes by providing data and tools to providers for assessing care and identifying opportunities for improvement. In 2007, one of the major ongoing HCQIP activities, the Clinical Performance Measures (CPM) Project, entered its fifteenth year.

The CPM Project was designed to assist ESRD caregivers to measure outcomes, assess their care processes, and identify opportunities for improvement. Another purpose of the project is to establish a consistent clinical database. The CPM Project measures key components of care associated with dialysis, which can be considered data points to use to trigger improvement activities. The clinical data provide information on dialysis adequacy (urea reduction ratio and dialysis prescription), anemia (hemoglobin, use of erythropoietin or darbopoetin and iron administration), mineral metabolism, vascular access, and nutritional status (serum albumin).

Facility-specific analysis for the national CPM Project is not possible due to the patient sampling methodology. However, this was addressed with Network #15's participation in the "Lab Data Collection" project that was begun in 2005 (*summarized later in section B.2.*).

Following the annual ESRD Facility Survey reconciliation for calendar year 2006, the SIMS patient database was utilized to choose the CPM Project random sample. The hemodialysis sample included adult, in-center patients and 100% of the Veterans Affairs' (VA) hemodialysis patients, who were alive on December 31, 2006; the sample size for Network #15 adult hemodialysis population was approximately 670 patients. Additionally, CPM information was collected on 100% of pediatric patients who were less than 18 years of age. The number of pediatric patients included was 94. The Network's peritoneal dialysis (PD)

sample included 124 patients. This sample included 100% of the VA and pediatric peritoneal dialysis patient population.

During May-August, the 2007 CPM data collection forms and instructions were distributed to facilities including; LDOs, Independents, and VA facilities for completion. In Network #15, approximately 217 facilities participated in the project. One hundred percent of the expected forms were received and reviewed by Network #15 staff members.

The Network requested facility staff to abstract the required information and return the forms to the Network office. Network staff answered numerous questions from facilities regarding the standardized CPM instructions and the data collection forms for this project. Completed and/or edited CPM forms were returned to the Network office and entered. Numerous telephone calls were made to the facilities for clarifications and corrections. Due to the unusual problems created by electronic data collection for selected LDO facilities and the initial non-participation of Veterans Administration Hospitals the 2007 CPM data collection required additional time to review and edit forms.

Data validation of 2007 CPM data was conducted as directed by CMS. Data were re-abstracted by the Network staff on assigned adult and pediatric hemodialysis and peritoneal dialysis cases (5% sample of the initial 5% random sample) by requesting copies of the medical records for review and re-abstraction. The data validation was completed, data entered and files delivered by the due date.

Annually, the Network #15 Medical Review Board reviews the National and Network CPM results and formulates a plan of action to address opportunities to improve care within the Network. The 2007 (2006 data) CPM Preliminary Data was reviewed with the MRB during it's meeting in February 2007 and the MRB advised the Network 15 staff to follow the approved Quality Improvement Work Plan (QIWP).

Albumin, stenosis monitoring and catheter reduction were areas that Network #15 addressed per the QIWP. Educational tools and various articles and memos were sent to address the individual areas (Appendix C).

3. *Network #15 Lab Collection Project*

The national CPM Project data provides aggregate data that is Network-specific and national in scope. These data cannot be used to define state-specific or facility-specific results (due to the limited sampling technique). Historically, Network #15 collected facility-specific aggregate data via its "Key Data" annual project. As in the 2003-2006 SOW, facility-specific data collection continues to be limited as directed by CMS in the current SOW. In the light of this, Network #15's MRB directed the Network to collect facility-specific data using a different vehicle. The Medical Review Board (MRB) of Network #15 agreed to collect

this valuable clinical data by participation in the 2007 "Lab Data Collection" project. This data collection involving, large dialysis organizations (LDOs) and independent dialysis facilities, was approved by CMS. Within Network #15, 100% of the eligible dialysis facilities operating in 2006 participated in the data collection for the fourth quarter of 2006. Data were for the months of October, November and December of 2006 in the spring of 2007. The collected data elements included the following laboratory values for hemodialysis patients: hemoglobin, TSAT (if done), ferritin (if done), pre BUN, Post BUN, albumin, albumin method, calcium, phosphorous, Kt/V for hemodialysis patients. Data elements collected for peritoneal dialysis patients included weekly CrCl, weekly Kt/V urea, anemia and nutrition markers, and calcium and phosphorous.

Facilities in need of assistance were identified, as well as well as those facilities that exceeded expectations. The facilities that excelled in their clinical outcomes received the 2007 ACE (Awards for Clinical Excellence). Additionally, clinical criteria for ACE were reviewed during the MRB meeting on September 21, 2007 and standards were revised.

Network #15 facilities received a copy of the clinical outcomes as reported for the 2006 Lab Data Collection in the fall of 2007. At that time the facility representatives were encouraged to review the information that was provided and to develop an improvement plan(s) if appropriate. Follow up and QI assistance was offered to these facilities by the Network QI staff throughout 2006. Collection of the 2007 Electronic Lab Data will begin in early 2008.

4. *Reducing Infections in HD/PD Patients*

This project began in late 2007 and is still in the preliminary stages. The Kidney Epidemiology and Cost Center (KECC) Report for 2007 indicated an upward trend in hospitalizations due to septicemia. An MRB subcommittee made initial recommendations regarding potential reasons for the increased rates as well as potential interventions.

5. *Improving Immunization Rates for Hepatitis B, Influenza and Pneumococcal Pneumonia- Safe and Timely Immunization Coalition*

The 2007 activities for this quality improvement project are detailed in the Coalitions and Special Projects section of the Annual report in section III. E. 6.

6. *Promoting Increased Referrals from Dialysis to Transplant*

The 2007 activities for this quality improvement project are detailed under the "Improving the Independence, Quality of Life and Rehabilitation of Individuals with ESRD through Transplantation," the "Use of Self-Care Modalities and In-Center Self-Care, as Medically Appropriate," and the "Through the End-of-Life" sections of this report in section III.C. 1.

7. *Encouraging the use of the DPC Tool Kit in regions or facilities identified as having unacceptable rates of involuntary discharges*

The project design and activity began in the second quarter of 2007 and as stated in the title, aims to encourage the use of the DPC Tool Kit in regions or facilities identified as having unacceptable numbers of complaints/grievances or involuntary discharges.

2007 Activities for this project included the formation of an MRB subcommittee on Complaints/Grievances/Involuntary Discharges to examine patterns of concern in these reported areas. Barriers to improvement may include lack of facility staff interpersonal skills and conflict management capabilities my contribute to patient complaints and involuntary discharges Anecdotal information leads to the conclusion that few Network #15 facilities have maximized the resources of the DPC Toolkit.

8. *Fostering Internal QI at Dialysis Facilities*

In the third quarter of 2007, the Network provided information to facilities regarding continuous quality improvement as well as materials to introduce facility staff to the "rapid-cycle" method of improvement. To promote this education, each facility received a quality improvement notebook containing practical resource materials and QI templates that could be used in their quality improvement activities. Facility-specific trend reports for clinical indicators were also included, as well as facility-specific vocational rehabilitation reports.

9. *Other Quality Management Activities (QMA)*

A sample of other quality management activities during 2007, that have not previously been highlighted include:

Network staff helped to coordinate the Data and Quality Improvement sessions for the 2007 Annual CMS/Network meeting. The Executive Director was appointed the Chairperson for the 2008 Annual meeting and as such spent numerous hours coordinating plans for the 2008 meeting. The Director of Information Systems was a member of the planning committee and spent many hours assisting the Executive Director with activities required for the 2008 meeting.

The Network ED was on the workgroup to revise the quarterly report format, aimed to make it more compatible with the current SOW. Networks 15 and approximately 6 other Networks piloted the document prior to its general release.

In January of 2007 staff members attended a WebEx presentation given by Amicus, Inc. titled, "Transforming Healthcare: Building Trust and Engaging Physicians in Quality Improvement."

The Network circulated safety information from the FDA and CMS regarding dosing of Erythropoiesis-Stimulating Agents (ESAs) as well as information from the Renal Physicians Association to assist providers in determining the appropriate course of therapy for patients being treated with ESAs.
The Network circulated information from the CDC and NV Department of Health regarding the Hepatitis C outbreak in NV as well as information regarding Heparin recalls.

Network staff "Blast-Faxed" information on hand hygiene and tips to prevent infections to all facilities in NW #15.

Purchased enough albumin magnets that each patient in Network #15 could receive one, and mailed them to all facilities in the Network in May 2007. This product was designed by a Network #15 patient and board member (dietitian) to promote improved nutrition among dialysis patients. A Spanish version of the magnet in poster form was also made available to requesting facilities.

The Network promoted immunization awareness month in August of 2007 by sending a poster out to facilities titled, "Vaccines Aren't Just for Kids."

In August, Network staff attended a WebEx session, part of the Transformational Grand Rounds program titled, "Improving Vaccination Rates . . . Successful Innovations." Clinical information from this presentation was reviewed prior to the production of the immunization-tracking tool that is part of the Safe and Timely Immunization Coalition (STIC).

The Network solicited feedback regarding the effectiveness of the newsletters it has been producing for facilities (Renal Roundup for patients and Intermountain Messenger for staff members). The renal providers in the Network community very positively receive both publications.

The Network provided each facility Social Worker with a complimentary copy of "A Meditation to Help with Dialysis." This 58 minute CD consists of guided imagery and affirmation messages with the author describes as "designed to promote relaxation, ease discomfort, reduce fear of needles, help with adherence to necessary dietary changes, stabilize blood pressure, increase energy, counter depression and support a positive outlook."

The resource "Recommendations for Addressing End-of-Life Care in ESRD was sent by the Network to all facilities in March 2007.

The Network provided a meeting space for a WebEx given by the ANNA & it's chapters titled, "Assessment of the Renal Failure Patient with Acute care Needs."

During 2007, the QI Department continued to provide *"Network #15 Guidelines for Care of the ESRD Patient"* to new (and several existing) facilities. The Guidelines will be updated by the MRB following the release of the long-awaited Conditions for Coverage that is anticipated for early 2008.

Facility Administrators and Medical Directors received a copy of the Dialysis Facility Report (DFR) and the 2007 Lab Collection Reports in July 2007. The University of Michigan Kidney Epidemiology and Cost Center (UMKECC) conducted the statistical analysis for the DFR information with funding from the Centers for Medicare & Medicaid Services (CMS).

In order to continuously improve the Network's internal processes and to promote good QI practices within the Network organization, Network #15 has in place a dynamic Internal Quality Improvement (IQI) program. The Network #15 Project Officer has recognized Network's IQI program as a model program and the content of this program has been shared with other Network organizations. Examples of current I-QI focus areas as of the end of 2007 include, but are not limited to:

- Improving the % of facilities reporting Fistula First monthly data
- Improve the timeliness and accuracy of manually submitted Fistula First data
- Reducing the number of phone calls necessary to complete data collection projects
- Improving Community Education and Resource Activities, by integrating patient feedback into the Network plan for providing community education and resource materials to patients.
- Evaluate the satisfaction and effectiveness of TOPIC calls
- Improving the effectiveness of facility-profiling and trend analysis for complaints and grievances/Improving data collection and increasing oversight to deter involuntary discharges
- Improving communication with the DOH
- Monitor for timely submission of required administrative reports
- Database management
- Timeliness of reporting renal status of Medicare ESRD beneficiaries
- Refining missing UNOS transplant registration and follow-up form tracking procedure

C. Improve the Independence, Quality of Life and Rehabilitation (to the extent possible) of Individuals with ESRD Through Transplantation, Use Self-Care Modalities (e.g., peritoneal dialysis, home hemodialysis), and In-Center Self-Care, as Medically Appropriate, Through the End of Life.

1. *Promotion of Self-Care Dialysis*

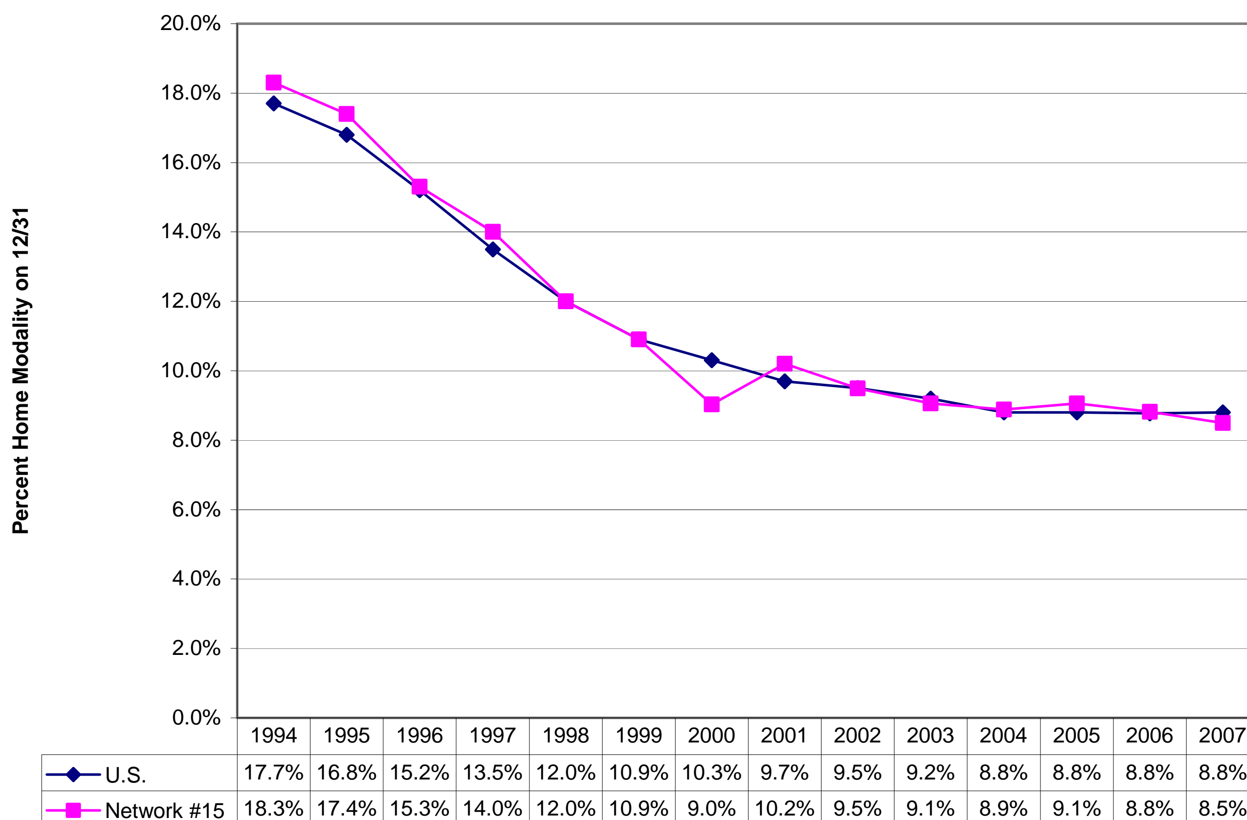
Network #15 promoted the use of self-care dialysis through educational activities such as distribution of the CMS National New Patient Packet and the Network-specific New Patient Packet, as well as other educational materials and through the adoption of criteria and standards that encourage the use of self-dialysis.

In 2007, Network #15 provided all dialysis facilities with information on self-care dialysis resources to be shared with patients. Included in this mailing were lists of home dialysis providers in Network #15, useful information in starting a home dialysis program, a DVD on home treatment modalities and a tool for patient-modality assessment, Methods to Assess Treatment Choices for Home Dialysis (Match-D), as well as in-center self-care information (Appendix D).

Information on patient self-care, both as a patient mindset as well as a treatment modality, can be found on the Network #15 website to encourage patient interest and involvement in self-care. The MRB's goal for self-care is to ensure that patients are receiving information about self-care dialysis and that they are aided in obtaining this modality if it is their choice and is medically appropriate.

The utilization of self-care (home dialysis) in Network #15 remains near the national rate but has, in general, mirrored the decline seen nationally in recent years. The Network #15 rate for 2007 is 8.5%, showing a modest decrease compared to 2006's rate of 8.8%. 2002 to 2007 national data included in the chart below was obtained through national figures entered into the Standard Information Management System (SIMS). Prior to 2002, data was pulled through Renal Beneficiary Utilization System (REBUS), formerly used by CMS for tracking renal patients. It appears that the percent of patients utilizing home dialysis care in Network #15 in recent years is close to the national figures. These rates were calculated using the number of patients in a self-care setting on the last day of each year divided by the total dialysis population on that date. This methodology is limited in that it does not include patients who start dialysis, go on self-care, and then stop self-care in the same calendar year (numerator). Also, it does not include patients who begin dialysis, may or may not go on self-care, and then have a transplant or die in the same calendar year (numerator and the denominator).

See the table below showing percent of patients on home dialysis modalities:



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S.	17.7%	16.8%	15.2%	13.5%	12.0%	10.9%	10.3%	9.7%	9.5%	9.2%	8.8%	8.8%	8.8%	8.8%
Network #15	18.3%	17.4%	15.3%	14.0%	12.0%	10.9%	9.0%	10.2%	9.5%	9.1%	8.9%	9.1%	8.8%	8.5%

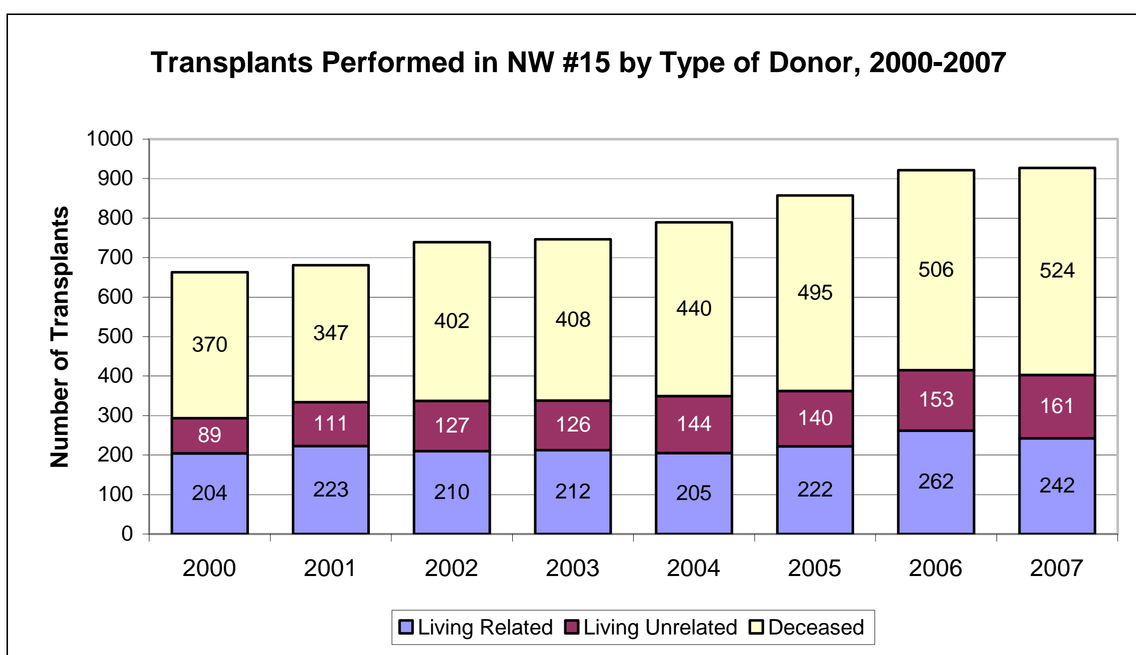
2. *Encourage the Use of Transplant Modality*

Network #15 continues to promote the use of transplantation as a treatment modality through distribution of the Network #15 New Patient Packet and via clearinghouse mailings regarding pertinent technological innovations and modality information on the Network website.

The MRB has established the Network goal that all patients receive information regarding transplant and be assisted in receiving a transplant if medically appropriate. The USRDS-computed standardized transplant ratio for Network #15 was 1.15 for 2003-2006. As in the case with self-care dialysis, the MRB identified important factors affecting patients' choices about transplantation. Cultural factors, age, financial disincentives, co-morbid conditions, and psychosocial factors play significant roles in the patients' decision making regarding modality. The MRB observed that age alone is an insufficient reason for a patient not to be on self-care dialysis, or not to be a candidate for transplantation. The MRB noted that age must be considered along with other factors, most importantly the presence of co-morbid conditions.

Contact information from all fourteen Network #15 transplant facilities is available in the patient information section of the Network #15 website. There is also website information regarding transplant listing issues ("Kidney Transplant: Am I Ready?") as well as various links to other renal transplant websites of interest. Additional information related to the subject of transplantation was accumulated by Network staff and was used for the 2006 issue of the patient newsletter, *Renal Roundup* that was disseminated to incident patients in 2007 in the Network #15 Network-Specific New Patient Packet (Appendix F).

The number of transplants performed in Network #15 in 2007 was 927, compared to 921 in 2006. Fifty-seven percent (524) of the renal transplants performed in Network #15 during 2007 were from deceased donors. Living-related donors accounted for 26% of the year 2007 transplants, and 17% were from living-unrelated donors.



3. *Rehabilitation/Vocational Rehabilitation (VR)*

Network #15 encourages patient and facility participation in vocational rehabilitation in a variety of ways:

- Through the mailing a packet of information directly to each new patient in its six state areas. This packet includes the National Kidney Foundation brochure "*Working with Kidney Disease.*"
- By encouraging facilities to increase their involvement with vocational rehabilitation programs through the inclusion of an annual delineation of

the patient's vocational rehabilitation status and needs on the Vocational Rehabilitation Referral Status Code sheet, a suggested adjunct form to the patient Long Term Program (LTP).

- Provides an ongoing single-number source of information for VR counselors to obtain information about dialysis and transplantation in general or about specific facility resources.
- In November 2007, dialysis facility social workers were sent a Vocational Rehabilitation Resource Folder with the following contents:
  - Facility-specific vocational rehabilitation data (survey years 2005/2006)
  - Life Options Rehabilitation Program resource information*
  - Materials on Health-Related Quality of Life (HRQOL) measures*
  - List of ESRD Network #15 state Vocational Rehabilitation Office websites*
  - List of state-specific Vocational Rehabilitation Offices*
  - Sample Employment Facilitation letters to be signed by the patient's physician and sent to the patient's employer or prospective employer, as appropriate
  - Family and Medical Leave Act of 1993 summary
  - *The ADA: Your Employment Rights as an Individual with a Disability**
  - Social Security: *Working While Disabled—How We Can Help (2007)**
  - Social Security Online—*Red Book*—Table of Contents (2007)*
  - Vocational Rehabilitation Survey Tracking Tool for survey year 2008*
  - *The Benefits of Volunteering**
  - List of state-specific Work Incentives Planning and Assistance (WIPA contractors (provides work information and planning services to SSDI and SSI recipients)*
  - *Build your Own Sandcastle*, a motivational article by a patient for patients*

  (* Indicates new or updated material from 2006 mailing)

- The Network provides links to VR services on its website, including Life Options Rehabilitation Advisory Council (LORAC) and the 27th Institute on Rehab Issues "Effective Strategies for Improving Employment Outcomes for People with Chronic Kidney Disease." Please see Appendix E for materials related to Vocational Rehabilitation provided by the Network.

Additionally, the Network conducts the annual vocational rehabilitation (VR) surveys of all dialysis facilities per its contract with CMS. The 2007 survey, compiling data on VR activities, profiled:

Number of patients ages 18 through 54
Number of patients receiving services from VR providers

Number of patients employed
Number of patients in school
If the dialysis unit offers an after 5pm shift

Please see Table 8 for Network #15 VR data for 2006.

4. ***Other Patient Related Activities***

The December 2006 edition of the Network #15 patient newsletter, *Renal Roundup,* was sent to all Network #15 dialysis and transplant facilities with a request for distribution to their patients, and was sent to new patients in the Network #15 New Patient Packets during the majority of 2007 Articles in this issue transplant issue contained information about finding a living donor, how the transplant waiting list works, fistulas as the optimal dialysis access, transplant facilities in Network #15, information describing what the Network is and how to access its website (as well as toll-free phone numbers), the grievance process and local patient resource organizations (Appendix E).

During 2007 a series of 3 patient educational flyers/contest entries written in both English and Spanish promoting A-V fistulas as the optimal vascular access was sent to every dialysis unit for distribution to all prevalent patients. This series, called *Learn and Earn: A Focus on Fistulas*, dealt with the advantages of A-V fistulas over grafts and catheters, how to manage the "stick" pain, and how to deal with the way it looks. Each subsequent drawing of the series received an increasing number of patients' contest entries (Appendix G).

During 2007 the Network re-printed the CMS publication, Preparing for Emergencies: A Guide for People on Dialysis, into a spiral-bound documents for patients. The booklet was sent to each facility with a request to leave it in the lobby for access for patients.

In 2007 the Patient Leadership Committee (PLC) formed three workgroups of patient volunteers to develop materials addressing the following areas of educational needs for patients: dialysis adequacy information; vascular access issues for new patients and promoting the message to patients of what the Network is and how it functions to assist them. The adequacy brochure, "*Do You Feel as Good as You Should"? which was* substantially completed by the end of 2007 (Appendix H).

All Network #15 facilities were sent two durable "lobby copies" of the April 2007 version of the *Medicare Coverage of Kidney Dialysis and Kidney Transplant Services* booklet as a patient resource.

Network staff worked with the PLC on content and format to revise the Network grievance poster at facilities.

Network staff collaborated with the Indian Health Service (IHS) staff in Gallup, New Mexico regarding the script and filming of a culturally sensitive video in Zuni, Navajo, and English languages pertaining to vascular access placement, use, and care.

The PLC members were sent a copy of Dialysis Without Fear and were asked to provide their opinions on the usefulness of the book for patients.

D. Improve patient perception of care and experience of care, and resolve patient's complaints and grievances

1. *Complaints and Grievances*

A copy of Network #15's "Protocol for the Evaluation of Patient Complaints and Grievances" was sent out to all facilities in 2007. It is used to guide Network #15 action taken on patient complaints and grievances (Appendix I).

The document on grievances to be given to patients, "Network #15 Patient Grievance Protocol," is posted on the Network #15 website and appears in Appendix I.

In 2007, Network #15 reminded all facilities that their facility-level grievance procedures must be posted for patients, as well as the Network grievance procedures. Two laminated Network grievance posters, both in English (*Have a Problem?)* and Spanish (*Tiena algun Problema?),* were sent to new facilities. The posters detailed the suggested steps to resolve a problem and gave patient resources specific to each Network #15 state. The toll-free telephone number of Network #15 was on the posters, as well as the phone numbers of the State Health Department and CMS Regional Office. The posters had been previously sent in 2003 and 2004 to the existing facilities at that time, with the expectation that facilities post the documents on a patient bulletin board or in another appropriate location and retain them indefinitely.

Some calls to Network #15 directly seek information or require information from another agency or government entity for problem resolution, such as a new patient calling to inquire when his or her Medicare benefits will be approved. When a call necessitates referral to another source, Network #15 staff members make every attempt possible to make accurate and expedient referrals to link the caller to the proper resource.

When dealing with issues that are under its quality of care purview, Network #15 encourages patients and facilities to work together toward reconciling differences and coming to an acceptable solution about matters called to the Network's attention, if the matters do not involve serious care issues. Network #15 maintains a file of submitted complaints and Network staff members are always alert for signs of trends in concerns or complaints as to issue and/or location.

Network #15 involvement in the grievance process, even at the "informal grievance" (complaint) level, includes, but is not limited to, discussions of the care disputes, interfacing with providers, and when appropriate, referral to various agencies or other sources of information.

In 2007, the Network #15's Patient Services Department was expanded to include another position, Patient Services Coordinator, assisting in developing, implementing, and evaluating all programs related to ESRD patient services in the Network. The individual hired was a licensed social worker with many years of experience as a dialysis facility social worker and more recent experience as a dialysis facility administrator. The Director of Patient Services and the Patient Services Coordinator, as well as other Network staff, provided technical assistance to multiple facilities in 2007, a number of which had considered the permanent involuntary discharge of a patient. During these discussions, suggestions were made to facility administrators, head nurses, social workers, and physicians, concentrating on options for dealing with the challenging patient in order to prevent/delay patient discharge. Options included behavior contracting and shortened treatment time immediately following inappropriate behavior, as well as making referrals to deal with root causes of some inappropriate behavior, such as unaddressed or under-addressed substance abuse and mental health issues. Education and technical assistance were given concerning federal regulations governing patient discharge. Also, print and video resources for use to supplement staff in-services were suggested to facilities to aid in their dealings with challenging patient situations.

Network #15 acknowledges the CMS-funded Decreasing Patient-Provider Conflict (DPC) Program as an invaluable resource for conflict resolution in dialysis facilities, and actively promotes the use of the DPC Program. When facility staff members call the Network to discuss difficult situations involving patients, the DPC is one of the suggestions given. Also included in the Winter 2007 edition of the facility newsletter, *Intermountain Messenger,* was an article on DPC, "What is Your DPC IQ?" asking facilities to tell the Network of their experiences with the DPC. Several new and replacement DPC Toolkits were mailed to facilities in 2007.

In 2007 the following resource was posted on the Network #15 website for facility staff: the PowerPoint presentation "Decreasing Patient-Provider Conflict: Barriers, Expectations, and Resources," co-developed and co-presented by the Network #15 Director of Patient Services with another Network PSC as a session at the Southwest Nephrology Conference on February 24, 2006 in Phoenix, AZ. The presentation highlighted risk factors for patient-provider conflict, noncompliance, the root of noncompliant behavior, and strategies to address them.

During 2007, Network #15 Quality Improvement and Patient Services staff members worked collaboratively with specific Network #15 facilities to improve

care in those facilities, based upon patient complaints and concerns. Efforts were made to foster quality improvement activities in not only staff competency and patient safety, but also staff respect, dignity, and sensitivity issues stemming from previous patient complaints and/or State Survey Agency facility survey results.

Prior to 2007 to address the nationally rising trend of patient involuntary discharge for non-adherent behavior (non-compliance), the Network #15 Medical Review Board convened a subcommittee in 2003 to examine all relevant issues. The subcommittee and full Medical Review Board determined that a letter to all Network #15 providers should be sent addressing the issue and entreating all administrators to consider every option in dealing with problematic patient issues before considering patient discharge, and offering the Network as a resource to assist with attempts at problem resolution. This letter, as well as the MRB-created document "Guidelines for Patient Discharge" was sent to all facilities in December 2006 to provide facility direction in 2007 (Appendix J).

Since the inception of the monthly Patient Activity Report (PAR) on April 1, 2004, which mandated facilities to provide data to Networks regarding involuntary patient discharge, the Director of Patient Services has reviewed the circumstances of all reported patient involuntary discharges by calling the facility administrator of each facility involved. All 2007 involuntary discharges, unless previously discussed with the facility, were audited in this fashion. Results were trended by facility, state, and patient demographics, for review by both the Network Medical Review Board and Board of Directors. A subcommittee examined Network statistics regarding complaints, grievances, and involuntary discharges using the methodology of rates of occurrence per thousand patient-years. In this fashion, facility- and state-specific rates could be calculated and compared to the overall Network rates.

During the last quarter of 2007 the Patient Services Department created and began use of a tracking tool to follow those patients identified as being "at risk" for involuntary discharge based upon communication with Network facility staff. This tracking tool serves as a diary to enter information on at-risk patients, their facilities, reasons for potential future discharge (non-adherence, non-payment, abusive behavior), and to designate a Network Patient Services staff member to follow up in calling the facility to monitor case progress monthly, offering technical assistance to the facility and assuring that the patient's rights are being upheld, for the duration of one quarter. Though the number of at-risk patients monitored was relatively modest (30) for this year, 20 of them had a definite resolution by the end of the monitoring period. Of those 20, 65% of them had a positive outcome (the facility retained the patient, or patient left the facility of his/her own will), and 35% had a negative outcome (the facility discharged the patient). The Network Patient Services staff members feel that this activity is a rapid-cycle intervention that is proactive and offers enhanced technical assistance to facility staff. Further, we are certain that in some cases, our ongoing, sometimes aggressive follow-up kept patients at a facility that had been

contemplating their involuntary discharge.

The Network staff continues to provide a patient-centered problem resolution process at the entry level of a complaint, thus potentially decreasing the number of concerns that escalate into formal grievances.

As reported using the SIMS Aggregate Contact Information for Network #15, in 2007 there were 528 total Contacts (note: a Contact represents a call lasting 5 minutes or longer. Calls under five minutes in duration are tabulated separately). An attachment (Appendix K) to this Annual Report summarizes the Contacts entered into SIMS in the year 2007, profiling all data using the 18 standard SIMS categories of Areas of Concern (e.g., Treatment Related/Quality of Care, Staff Related, Patient Transfer/Discharge, Abusive, Disruptive, Non-Compliant).

In 2007, there were no formal grievances filed. Quality improvement follow up activities were conducted in 2007 with the facility involved in the last formal grievance. The facility Improvement Plan activities of 2007 are documented in the Network #15 Quality Improvement Department files.
To summarize Network #15 grievance activity for 2007:

Total number of formal grievances received in 2006: 0

Total number resolved ("resolved" meaning: "the complaint or grievance has been explained, corrected, or settled by the Network so that the complainant is in agreement with the determination or outcome"): 0

Total number processed and closed, but unresolved: 1

Total number referred: 0

Status of grievance(s): Closed

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

1. *ESRD Facilities/Providers*

Developing and maintaining cooperative and constructive relationships with the facilities within the Network is the MRB's approach to its responsibilities for continuous quality improvement. The MRB's philosophy is to meet CMS mandates by implementing programs that provide both the Network and facilities

with useful information about the ESRD care being delivered, programs that are least burdensome and most easily carried out within the existing practices of facilities, and those that maintain and improve, where possible, the quality of patient care.

Network #15 provided education for dialysis providers on the tools and techniques of CQI, as well as mentoring for individual QI projects was provided in various venues within Network #15. Some examples of activities conducted with Network facilities and providers in 2006 follow:

- Educational material concerning continuing quality improvement including the Network Electronic Data Project, the National CPM Project, USRDS and KECC-generated, facility-specific reports such as Standardized Mortality Rates, Standardized Transplantation Rates, Standardized Hospitalization Rates, as well as additional quality improvement materials as directed by the MRB or BOD;
- Educating dialysis providers on the tools and techniques of Continuous Quality Improvement;
- Broadcast fax to all facilities in Network #15 to alert them of pressing issues;
- Information regarding the heparin re-call of late 2007 was faxed to pediatric renal facilities in Network #15. Network staff contacted each pediatric unit to determine whether they had patients who experience symptoms reportedly linked to potential heparin contamination. Potential symptoms were discussed, as well as contact information to report symptoms should they occur. No pediatric facility in Network #15 was aware of this information prior to being contacted by the Network, nor did anyone have a patient who had experienced a reaction. A template/protocol for a hypersensitivity reaction that was developed by a Network #15 pediatric facility was circulated to other pediatric facilities in the Network. The protocol was also forward (with permission) to all other ESRD Networks;
- Network #15 staff members have worked collaboratively with specific facilities to improve care in those facilities, based on patient complaints/concerns or State Survey Agency reports. There were efforts to foster quality improvement efforts in staff competency/conduct and patient safety issues, providing the facilities with specific suggestions and provision of material, as needed;
- Network goals and objectives are distributed annually. They were included in the administrative “Annual Update” (Appendix A);
- Vocational Rehabilitation data are requested from facilities annually. In 2007, Network staff received and processed the data sent from facilities regarding 2006 rehabilitation data. At the close of 2007, the Network staff prepared for the 2007 vocational rehabilitation survey, which was sent in early 2008. Please see Table 8;
- The Executive Director, Director of Quality Improvement, and/or the

Director of Patient Services send an administrative update on current issues, with help from the Administrative Assistant, as necessary;

- The Network provided facilities with information concerning advances in ESRD technology and treatment, to encourage the use of medically appropriate treatment settings most compatible with patient rehabilitation;
- Network 1#5 staff provides "Network Updates," in the form of face-to-face meetings or conference calls to facilities upon request;
- There are periodic regional meetings of nurses, dietitians, social workers, physicians and administrators facilitated by Network #15, as necessary and appropriate to discuss advances in the field and issues of mutual concern;
- The Network updated its Dialysis Facility Compare website poster and instructions and distributed them to all Network #15 facilities letting patients and unit staffs know how to access the site and the types of information available on it. These posters (and black and white paper version for copying) included easy-to-read directions and screen shots to assist patients in navigating to and through Dialysis Facility Compare (Appendix L);
- Dissemination of clearinghouse information was accomplished in the following ways:
  Information that needed immediate dissemination to facilities was mailed directly to the appropriate facility personnel through issuance of a Network administrative newsletter. Small news items that did not demand immediate dissemination were saved up and sent at one time in order to conserve resources. The timing of the newsletter depends upon the occurrence of events. Items, which are deemed to be of high priority, are faxed to the appropriate people.

2. *ESRD Networks*

Network #15 is an active member of the Forum of ESRD Networks. The Network Immediate Past President served as President of the Forum Board of Directors and the Network MRB Chair serves as Vice President of the Forum Board of Directors. The Network Executive Director fills an "at-large" Forum BOD position. Network #15 participates in Forum activities and contributes to Forum projects. Network #15 staff members value the relationships that have been forged with other Networks' staff members and utilize these relationships as valuable resources in Network activities. Network #15 distributes newsletters, project reports, and Network #15-created resources to other Networks.

On an ongoing basis, Network #15 staff members provide consultation, technical assistance, or give actual Network #15 work products to members of other Networks who have contacted Network #15 seeking help with an issue.

The Executive Director interacts on a regular basis with other Network Executive Directors. This interaction allows for new ideas and sharing of successes.

The Quality Improvement staff has made efforts to assist new Quality Improvement Directors from other Networks in their daily activities. More specifically Network #15 has shared examples of Fistula First resources; feedback reports, letters, Internal Quality Improvement plan and CPM plans with other Networks.

The Data staff has fielded questions from many of the other Networks concerning VISION and now CROWNWeb. Network #15 has shared educational resources developed and has worked collaboratively with other Networks on Technical Expert Panels and on a variety of proposals sent to CMS. In 2007, Network #15 data staff assisted the hiring and mentoring of new staff at Network #18.

The Director of Patient Services has worked collaboratively with the Patient Services staff members of other Networks and has volunteered to serve on a subcommittee to deliberate patient depression issues for core data set purposes. Specifically during 2006, The Director of Patient Services provided consultation with other Networks about the following issues: vocational rehabilitation facility mailing format, tracking complaints and grievances, and complaint and involuntary discharge profiling.
She also co-facilitated a session of the annual Patient Service Coordinators summit meeting regarding patient involuntary discharges and underlying mental health problems. The Director of Patient Services for Network #15 provided orientation and direction for the new Network #17 Director of Patient Services.

3. *State and Regional Office Survey Agencies*

The six states in Network #15, Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, relate to their six respective state health departments and to three Regional Offices (RO VI - Dallas, RO VIII - Denver, RO IX - San Francisco). In addition, RO X in Seattle provides program oversight for the Network #15 program.

Historically, Network #15 has had a cooperative relationship with the state survey agencies in its six-state area. Individuals in each of these six state agencies and three regional offices have frequent contact with the Network staff. The ESRD technical expertise of the Network is always available to these agencies. Network #15 routinely participates in the quarterly San Francisco Regional Office Survey Agency Network (ROSAN) conference calls to discuss areas of concern for that CMS component.

Internal Quality Improvement (IQI) efforts by Network #15 continued to focus on improving communication between the Network and the various Departments of Health with which the Network interacts. As part of this effort, Network #15 provides each state health department with the *Annual Clinical Performance Measures Report*, Network newsletters, Network-specific data and other

informational mailings. Fistula First updates were provided via quarterly mailings and/or face-to-face presentations.

Network #15 has developed and maintained a cooperative relationship with the government agencies that work with renal providers. These include the Survey and Certification Branch staffs of the three Regional Offices that cover Network #15 states as well as the individual state health department surveyors in the six states. Cooperative activities during 2007 included reciprocal information sharing and joint problem solving:

- Network staff referred a number of patient/family/other concerns that involved survey and certification issues to State Survey Agencies and received requests of information from the State Survey Agencies;
- Quarterly ROSAN conference calls to discuss areas of concern for the states covered by the San Francisco Regional Office (AZ, NV);
- Several Network staff members collaborated with various State Survey Agency personnel regarding facility quality improvement issues following facility surveys;
- The Network maintains a current list of contacts for each of the six Departments of Health within Network #15.

4. *Quality Improvement Organizations (QIOs)*

Relationships for on-going ESRD-related studies have continued with the five Quality Improvement Organizations (QIOs), Colorado Foundation for Medical Care (CFMC), the Health Services Advisory Group (HSAG) in Arizona, the New Mexico Medical Review Association, Mountain-Pacific Quality Health Foundation in Wyoming and HealthInsight, the QIO for Nevada and Utah.

In December 2005 the Network coordinated and sponsored a coalition meeting that was held in Denver, Colorado. This coalition began examining the issue of pre-dialysis access placement and early identification of CKD patients. The coalition meeting included QIO representatives from all six states in Network #15, Network #15 staff, a nephrologist, a surgeon a PCP and nurse educators from two of the corporate dialysis companies that have facilities in the Network. The meeting resulted in the formation of the Dialysis Access-Chronic Kidney Disease Coalition (DA-CKD). To date in 2007, two sub-committees, a Provider Advisory Committee (PAC) and a Beneficiary Advisory Committee (BAC) continue work in this area. Every QIO in the Network area continued to be active in this coalition throughout 2007.

5. *The Renal Community*

Network #15 continues to recognize the importance of developing and maintaining cooperative relationships with the renal community in its area. Network #15 has made a determined and ongoing effort to coordinate its activities with other renal-related organizations and has participated in a variety of joint

activities. Network #15 has worked with the National Kidney Foundation (NKF), the American Association of Kidney Patients (AAKP) to avoid duplication of service to patients in the Network area.

Network #15 continued to work with the American Nephrology Nurses Association (ANNA) and the NKF to help provide annual educational opportunities for nephrology nurses and technicians, renal dietitians, renal social workers and nephrologists. The Network Director of Patient Services is a member of the NKF Council of Nephrology Social Workers. The Executive Director is a member of the Board of Directors for the NKF affiliate in Denver, CO. Many members of the Network BOD and MRB are active in their local NKF affiliates. During 2007, Network #15 staff members attended national meetings of ANNA and NKF. In 2007, the QI Director and the Executive Director continued to serve on the advisory board of one of the fiscal intermediaries that serve Network #15 states.

Network #15 maintains a cooperative relationship with the following renal organizations that are active in its six-state area:

- Arizona Chapter of the NKF
- NKF Chapter serving Colorado and Wyoming
- New Mexico Chapter of the NKF
- Utah Chapter of the NKF
- Phoenix Chapter of AAKP
- CNSW Chapters in Arizona and Colorado
- ANNA Chapters in Arizona, Colorado, New Mexico, and Utah.

Below is a summary of specific Network #15 community outreach activities:

- Information and referral to facility staff (telephone, e-mail or written inquiries);
- Information and referral to patients/families/advocates (telephone, e-mail, or written inquiries);
- Information and referral to members of other renal organizations (telephone, email, or written inquiries);
- Network #15 continues to participate in the ESRD Networks' Clearinghouse New Patient Packet project, updating information as necessary. The clearinghouse office mails this packet to all new patients for whom a 2728 has been received in the previous month. This project began September 2000. During 2007, nearly 4,900 incident patients in the Network #15 geographic area received these packets;
- Network #15 mails a packet of Network-specific information directly to each new patient in its six state area. In 2007 its contents included: the Network #15 brochure; *Dialysis Keeps People with Kidney Failure Alive…Are You Getting Adequate Hemodialysis*?; the Network #15 Patient

Grievance Protocol; the "*Network #15 Statement of Patient Rights and Responsibilities*;" and the *Renal Roundup* patient newsletter, and the National Kidney Foundation brochure "*Working with Kidney Disease;.*" The contents of this packet were altered to complement those of the national mailing and to avoid duplication of material;

- The Network #15 *Statement of Patient Rights and Responsibilities,* included in all New Patient Packets (referenced above), is available in both English and Spanish. This Statement has been adopted by the American Association of Kidney Patients (AAKP) and has previously been used by another ESRD Network in its patient newsletter;
- The Network #15 newsletter for renal professionals, *Intermountain Messenger*, was published and distributed two times in 2007. Examples of article subject matter are as follows:
  - Dialysis Water Treatment 101;
  - Immunization information;
  - Announcement of the ACE award winners and the criteria for the achievement of ACE status;
  - Data compliance information;
  - DPC materials reminders;
  - Vinegar alert for machine maintenance;
  - Fistula First articles and updates;
  - Albumin educational materials;
  - Information on Advance Directives.

- Network #15 has maintained a toll-free phone number for use by patients (1-800-783-8818) for many years. A second number (1-888-777-0105) was added in 2004. These numbers are included in the letter accompanying National New Patient Packet, as well as on Network materials designed for patients. This number is listed on the Patient Resources section of the Network's website.

6. *Coalitions/Special Projects*

Dialysis Access/Chronic Kidney Disease Coalition

During the second option year of the 2003-2006 SOW, the Network assisted in the organization of a coalition whose focus was Dialysis Access and Chronic Kidney Disease (DA/CKD). Throughout 2007, the Network continued to work with this coalition to focus on early identification of CKD patients and early access placement. The DA/CKD coalition is composed of members from the nephrology community, QIO representatives from all six of the states within Network #15, patients, CKD educators and others. Through the work of the coalition, two workgroups, the Provider Advisory Committee (PAC) and the Beneficiary Advisory Committee (BAC) the Network hopes to continue to see an increase in prevalent AVF rates. Work accomplished by the coalition in 2007 included:

- The patient organization, Renal Support Network (RSN) and the BAC worked on a public service announcement that will assist in educating patients to ask for a GFR when visiting their doctor;
- The BAC group began work on an article regarding eGFR and has contacts for publication in a major metropolitan newspaper's health section after its completion and required review;
- The PAC group received approval to use a CKD risk assessment tool developed by the research team at Cornell University in March of 2007. This tool was included in a mailing to primary care physicians and endocrinologists in NV and UT in late 2007.
- A nurse practitioner member of the PAC workgroup developed a CKD tool for PCPs/endocrinologists, and an MRB member drafted a coding letter both of which were included in the above mailing. Measurement of the use of these resources will be done mid-2008

Please see Appendix M for DA/CKD coalition materials.

Barriers to Outpatient Admission Dialysis Placement Project

In 2006, CMS funded the Barriers to Outpatient Dialysis Placement Project. One outcome of that project was to conduct a pilot program using the standardized forms developed as part of the project. Eight ESRD Networks, including Networks 1,9,10,11,14,15,16, and 18, participated in the three-month pilot project. From January 2007 until March 2007, the Networks completed an Admission Form for all calls related to barriers to placement and a Discharge Form for all calls related to involuntary discharges. In total, 53 Admission Forms and 87 Discharge Forms were submitted to Network 9/10, which compiled and analyzed the barriers information.

A number of patients who were involuntarily discharged had difficulty finding placement in other dialysis units. Non-compliance was the most frequent reason given for an involuntary discharge. The combined network demographics for the participating networks were used to identify any demographics that were outside what would be expected. According to the contact calls regarding involuntarily discharged patients, a higher percentage of patients were in the 18-44 year old category, were males, and were African American.

Most of the patients who came to the attention of the networks were unable to find dialysis placement due to being discharged by the facility. In addition, the patient's behavior was identified as the primary barrier. Comparing the combined network demographics with the demographics identified on the forms identified potential demographic placement barriers. Of all the contact calls the Networks received regarding difficulty with outpatient dialysis placement, a higher than expected numbers of patients were within the 18 to 44 age group, were male patients, and were African American.

Network #15 will continue to follow any additional activity related to this project with the participating Networks.

Safe and Timely Immunization Coalition-STIC

During 2005 Network #15 was invited to join Networks #6, and #11 as a partner in the Safe and Timely Immunization Coalition (STIC) project, aimed at improving immunization rates for patients at dialysis facilities. This project continued through 2007. The goal of the project is to improve patient and staff vaccination rates for Hepatitis B, influenza and pneumococcal pneumonia to the Healthy People 2010 goal of 90% by the year 2010. In addition to the goals of the immunization coalition, Network #15's MRB has suggested that facilities work to achieve the following vaccination goals:

- To administer the pneumococcal vaccine within 24 months of the start of dialysis,
- To administer the influenza vaccine to patients annually,
- To administer the Hepatitis B series within the first year of dialysis.

The final results of this collaborative effort will be to develop guidelines for immunization that are specific to patients with ESRD, provide a toolkit of educational materials for facilities to use to improve their immunization rates, produce an immunization practice patterns survey and formulate an immunization data collection tool and feedback reports for facilities. Activities conducted in 2007 included:

- In January 2007, reports containing baseline influenza data were sent to each participating facility. The reports contained comparative data for facility, state, Network and aggregate for Networks #6, #11 and #15, ideas to help facilities meet the Healthy People 2010 goal to vaccinate 90% of patients with ESRD, a sample standing order for influenza vaccination of adults and a letter of endorsement from the Medical Review Board of Network #15 which also contained web-addresses for facilities that might have MDCR vaccination coverage questions.
- The QIDs from Networks #6, 11 and #15 in conjunction with the Network #15 biostatistician assisted with the development of facility-specific reports for pneumococcal and Hepatitis B vaccines.
- The Network received approval for and collected influenza vaccination information from 100% of facilities for the 2006-2007 influenza season.
- Network #15 facilities completed an intervention ranking for influenza season 2007-2008. This information was collated, tabulated and sent to Network #6 for analysis.
- Facilities also completed a voluntary STIC educational materials evaluation in conjunction with Networks 6 and 11, which was collected on-line via zoomerang survey.
- The Network coalition members assisted in the design of interventions to improve influenza vaccination rates. Interventions included:
    - 22 Network #15 facilities with low influenza vaccination rates participated in the activities outlined below;

- Opportunity to attend three web-ex sessions, ”Protecting your Health the Importance of Vaccinations”, “Overcoming Barriers to Vaccination / How Tos,” and “A CQI Approach to Improving Immunizations”;
- Assistance with completion of action plans, and submission of those plans to the Network in November of 2007 and;
- Monthly follow-up and tracking of immunization rates by the Networks.

- An additional 12 facilities that had difficulty completing the initial data collection in 2006, were offered a mechanism to assist them in tracking their current immunization rates.
- All Network #15 facilities began concurrent tracking of influenza vaccinations for the 2007-2008 season, as well follow-up collections of pneumococcal pneumonia and Hepatitis B vaccine administration. The collection will be completed during the first quarter of 2008.

Kidney Community Emergency Response Coalition (KCER)

Network #15 continues to be an active participant in the National Kidney Community Emergency Response Coalition . Through the work with this coalition, the Network has added a number of resources for both facilities and patients to the Disaster Preparedness section of its website. As directed by CMS, the Network staff has collected two emergency contacts and two ways to reach those contacts for each facility within the Network. This information is contained within the Network’s Emergency Preparedness Plan.

Other outreach activities:

- Responding to requests for data from entities outside Network #15: All Network staff, but usually the Director of Information Systems, Executive Director, Director of Patient Services or Director of Quality Improvement respond to a wide variety of agencies, individuals, and groups. Network #15 may collaborate with other agencies to furnish the requested information;
- Network #15 works with directors of the state Diabetes Control Programs for five of the six states in the Network, sharing information regarding diabetes-related ESRD in the Network. A special report was designed to identify age-stratified incidence and prevalence of diabetes-related ESRD in Network #15 states;
- Network #15 staff participate on various list serves, and respond, as appropriate, with information other participants are requesting;
- Pandemic flu information and links have been updated on the Network #15 website.

7. *Professional Education Program Attendance/Networking*

Ongoing education and networking is a vital element to Network #15.

Meetings hosted/presentations made by Network #15 staff:

- "On Course with Cannulation" workshops to facilities in Arizona, New Mexico, and Colorado January through December 2007;
- "Fistula First Update" presented at the Southwest Nephrology Conference, February 23, 2007, Phoenix, AZ;
- "Fistula First: Implications for Nephrology Social Work Practice" presented at the Southwest Nephrology Conference, February 23, 2007, Phoenix, AZ;
- During the fall of 2007, Network #15 coordinated an educational offering between Network #15, and a corporate dialysis company. The offering was presented to facility personnel and patients in the Phoenix, AZ area. Segments of the presentation included: Update on the Conditions for Coverage, QI basics and Data Interpretation, FF Update, OCWC, and a Data Department presentation on CROWNWeb and forms completion.
- In the fall of 2007, Network #15 provided a meeting space for a WebEx given by the ANNA & it's chapters titled, "Assessment of the Renal Failure Patient with Acute care Needs."
- An anemia presentation given by Pat McCarley RN, in December of 2006, remains posted on the Network #15 website for access by those who would like more information regarding the K/DOQI anemia guidelines.
- The Network Data Staff hosted and moderated ten calls with facilities that covered different data related topics such as forms compliance, the Patient Activity Report (PAR) and forms submission.

Meetings/conference calls attended:

- CMS and ESRD Network ED, QID, and PSC conference calls, at various intervals through 2007;
- Participated in Patient Services Coordinators quarterly conference calls;
- Participated in quarterly Data Managers conference calls;
- Participated in monthly CROWN and CRAFT conference calls;
- Participated in Quality Improvement Directors quarterly conference calls;
- Participated in multiple Fistula First Conference calls throughout 2007;
- Network ED participated in bi-weekly Fistula First Core Group calls in their capacity as Network liaison-elect to the FFBI Program Operations workgroup;
- The Network staff participated in Forum BOD and Administrative Committee conference calls throughout the year;
- Partnership Calls (National Coalition calls with Tom Wolff) January

through August 2007;
- Multiple Fistula First Breakthrough Initiative workgroup calls;
- Quarterly ROSAN calls with the San Francisco CMS RO;
- Participation in multiple KCER calls throughout 2007;
- Attendance at the national KCER coalition meetings in 2007;
- Computer Sciences Corporation (CSC) site visit, February 2007;
- Southwest Nephrology Conference 2007 Phoenix, AZ, February 23-24, 2007;
- CROWNWeb Alpha Testing Calls May- August 2007;
- MRB Self-Care Subcommittee conference calls throughout 2007;
- Alternatives to Email Archive Location conference call, January 31, 2006
- Dialysis Access/Chronic Kidney Disease Coalition focusing on CKD and AVF, multiple PAC and BAC phone calls monthly through 2007;
- Medical Review Board Meetings, February 16, 2007, Denver, CO and September 21, 2007, Denver, CO;
- Network #15 Project Officer and Science Officer Annual Evaluation Site Visit, April 3-5, 2007;
- Western Consortium Executive Director/Project Officer calls monthly through 2007;
- Monthly through 2007/2008 Southwest Nephrology Conference Planning Committee calls;
- CMS/Forum of ESRD Networks' Annual Meeting 2007 Baltimore, MD, February 26- March 1, 2007;
- Participated in multiple conference calls for CMS/Network annual meeting planning committee, as well as participated in annual QID Business meeting, Baltimore, February 2007;
- CMS ISG visit, July 2007;
- National Disaster Coalition Workgroup calls throughout 2007;
- NKF of Colorado, Wyoming and Montana Board of Directors Meeting monthly through 2007;
- CROWNWeb Data Conversion Technical Expert Panel, May, 2007;
- Numerous Safe and Timely Immunization Coalition conference calls through 2007;
- CROWNWeb Technical Expert Panel Meeting, February and August 2007 Baltimore, MD;
- QualityNet Meeting, Baltimore, MD October 2007.

8. *Newsletters*

Written media continues to be an effective method of disseminating information to both the professional and patient members of Network #15. Network #15 published three newsletters to keep the members of the Network up-to-date on important issues. Please see Appendix E for copies of the Network #15 newsletters published in 2007.

- *Intermountain Messenger*, the Network #15 professional/ administrative newsletter, was distributed to all Network #15 facilities, Network Council members, Network Committees, state health departments, NKF chapters, and other interested parties during 2007;
- *Renal Roundup*, the patient newsletter, is published periodically as an information-sharing resource for the patients in Network #15. To assure delivery, the *Renal Roundup* is sent in bulk to facility Social Workers for distribution to their patient population;
- *Data Notes* is a section of the *Intermountain Messenger*. This recurring column clarifies CMS forms requirements and assists facilities in the accurate reporting of patient events and the processing of Medicare paperwork.

9. *Website*

The Network #15 website, www.esrdnet15.org, was updated regularly in 2007 to keep information current and to increase the amount of material available for both Network #15 patients and Network #15 professionals. Updated resources addressing emergency preparedness, Fistula First, Vocational Rehabilitation, educational resources for patients and professionals, infection control, immunization and the pandemic flu were added in 2007. The Network website is checked for compliance with CMS regulations semi-annually. Please see Appendix N for screenshots of the Network #15 website.

10. *Facility Directory*

Network #15 maintains a current Facility Directory and roster of renal professionals by category (physicians, administrators, nurses, dietitians, social workers) for use within the office. Traveling patients, renal vendors, and other interested individuals requesting information are provided with a directory of facilities by city and state as requested. Directories are created as needed to include the name, address, telephone number, type of facility and services provided for any facility in the area about which the individual is inquiring. These reports/directories can be e-mailed or mailed to individuals as requested. The Network no longer publishes an annual Facility Directory. Individuals are also referred to Dialysis Facility Compare.

F. Improve the Collection, Reliability, Timeliness and Use of Data to Measure Processes of Care and Outcomes; Maintain Patient Registry; and to Support the ESRD Network Program.

1. *Description of Network Data System*

In 2007, the Network #15 data system was comprised of a CMS leased server, a Network #15 owned LAN server, and desktop workstations. The CMS leased server was connected to the SIMS Central Repository and to the Internet through

the GSS firewall. All Network #15 communication/connectivity software/hardware and protocols met CMS/ QualityNet regulations and requirements for ERB approval.

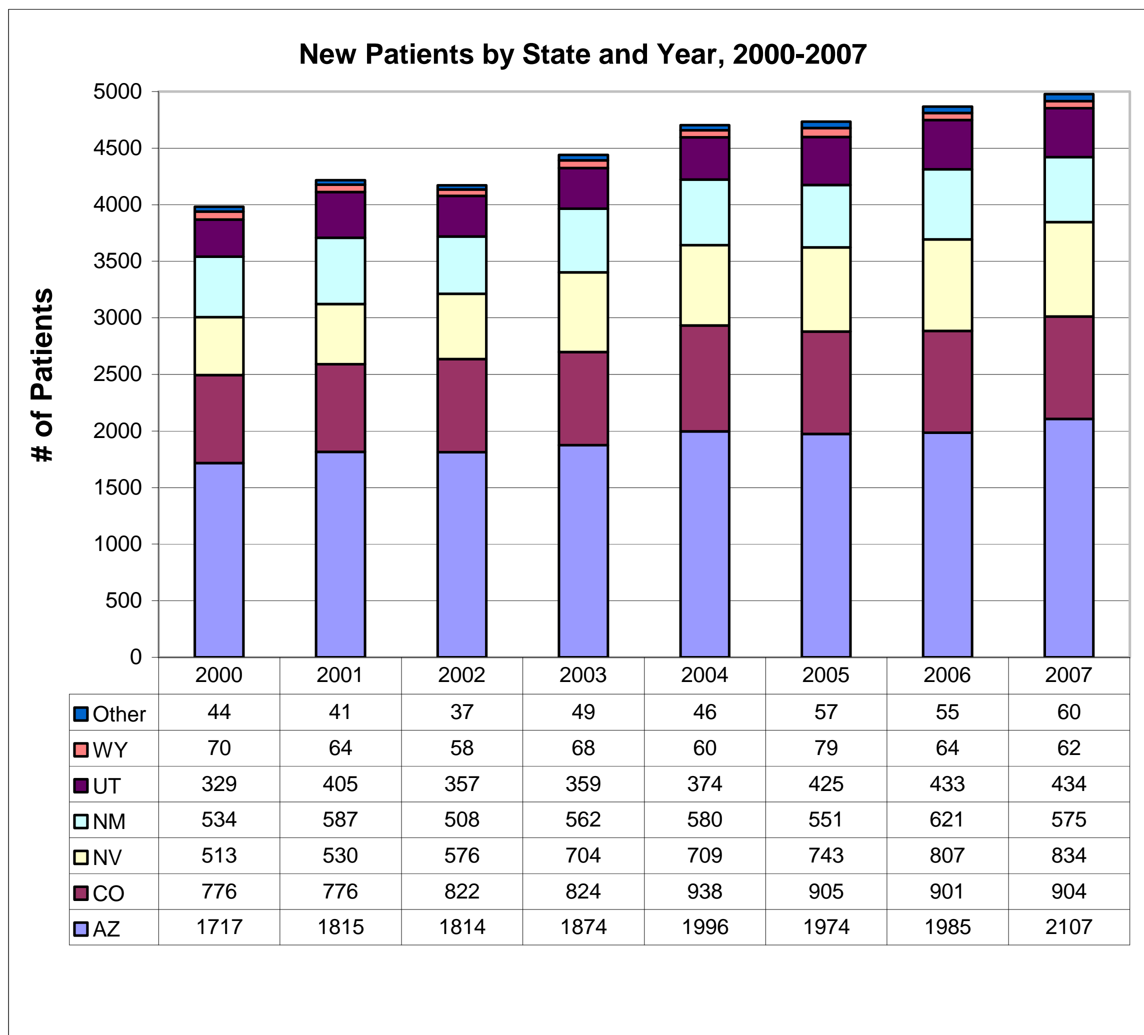
All patient tracking, facility information, and Medicare required forms were entered into and saved in the Standard Information Management System (SIMS) database. Network staff members continued to work with facilities in the use of the Vital Information System to Improve Outcomes in Nephrology (VISION) software. VISION facilities entered forms and events, and transmitted that information through the facility-based software program and QualityNet Exchange, the secure Web-based file transfer program maintained by the Iowa Foundation for Medical Care (IFMC). Information was then downloaded from QualityNet and imported into SIMS. In 2007, a total of 511 files from nine Network #15 facilities were downloaded from QualityNet and imported into SIMS. The number of facilities using VISION has decreased in recent years as CMS no longer supports the software since they are preparing to release CROWNWeb in February 2009.

All SIMS files and tables were backed up on a nightly basis. Replication of all SIMS information to/from the Central Repository and to/from other Networks took place nightly through the SIMS replication process. A daily log was kept of all back ups and replications as well as a log of required maintenance on the server. All other programs and files were backed up nightly on the Network #15 server. All accounting information was backed up on tape drive on the second network.

The following forms were received, validated, logged, and entered into the Network #15 SIMS database: CMS-2728, CMS-2746, monthly Patient Activity Reports (PARs), Network #15 patient event notifications, quarterly roster corrections, and the CMS-2744. Incomplete forms were returned to facilities for correction and completion.

In 2007, 5,240 CMS-2728s and 3,002 CMS-2746s were entered into the SIMS data system and replicated to the Central Repository.

The following table illustrates the increase in the number of new-patient 2728 forms by year in Network #15. In addition to the initial patient forms, 2728s are submitted for patients who have been off dialysis for over a year and then return to dialysis (recovered function/restarted); for patients who start on in-center dialysis and then switch to a PD modality in the first three months of treatment (supplemental training form); and for patients who must go back to dialysis more than three years post transplant. These are not reflected in the following table.



	2000	2001	2002	2003	2004	2005	2006	2007
Other	44	41	37	49	46	57	55	60
WY	70	64	58	68	60	79	64	62
UT	329	405	357	359	374	425	433	434
NM	534	587	508	562	580	551	621	575
NV	513	530	576	704	709	743	807	834
CO	776	776	822	824	938	905	901	904
AZ	1717	1815	1814	1874	1996	1974	1985	2107

Facility-specific information was updated on an ongoing basis to facilitate monthly transmission of information for Dialysis Facility Compare.

Notifications are processed weekly using the SIMS notifications utility. Twice a month, any notifications that need verification by the patient's facility are included in a report that is sent to any facility with outstanding notification issues.

The 2006 Facility Survey (HCFA-2744) was completed as required in April of 2007. As part of the Network #15 Internal Quality Improvement Initiative, the strategy continues to be "tweaked" as necessary to facilitate smooth, accurate collection of all necessary information. All Annual Report tables for 2006 were generated through the SIMS system in April and May of 2007.

The number of Medicare Advantage verification requests has increased since 2004. The number of requests had declined from 2000-2003 due to efforts made by CMS to help Medicare + Choice organizations streamline their request

process. However, over the past couple years when asked about the increase in requests, HMO's replied that they are completing some "cleanup" of old, outstanding records. In 2007, Network #15 was asked to verify ESRD status for 1,034 patients, significantly higher than the 590 status verifications in 2006, and the 518 status verifications in 2005. This increase appears to be climbing back up to the number of requests in 2001 (1,697) and 2000 (1,524).

2. *Report Capability*

The SIMS system now produces most of the reports needed by CMS and the Network. The programs most commonly used to generate additional reports for use by Network staff were ISQLW, Microsoft Access, and Crystal Reports. Complicated reports for specific cleanup activities or QI activities are created by a consulting programmer who utilizes SAS. Staff members continued to create additional queries on a daily basis that assist Network staff members with their day-to-day work.

Semi-annual forms compliance reports for 2007 were generated using the SIMS utility. Facility aggregated reports were submitted to the Project Officer in October of 2007 (for forms submitted in the first half of 2007), and then in March of 2008 (for all forms submitted in 2007). Facility reports with patient-specific information were mailed to facility administrators with appropriate cover letters based on compliance levels reached.

3. Special Data Requests

Most special data requests are for patient counts by zip codes. These reports are generated based upon SIMS data and are posted to the Network website. Other requests come from state Health Department Diabetes Control Programs, looking for cumulative demographic information on the Diabetes-related ESRD cases in each state.

Facility information (location, hours, services) is provided in hard copy format upon request and all requestors are referred to the Dialysis Facility Compare (DFC) website for additional and more detailed information.

With the inclusion of much of Network #15 demographic information on the Network #15 website, there has been a slight decrease in the number of data requests received at the Network office.

4. Data Validation and Improvement Efforts

VISION Validation

Pursuant to CMS requirements, Network #15 conducted a validation of patient and physician signatures on the CMS-2728 forms received electronically through

VISION. Three percent of 2728 forms per VISION facility (with a minimum of one form per facility) were randomly selected from all forms submitted electronically in 2007. These forms were then sent to the Network office. All facilities were found to be in compliance with the signature requirements outlined in the Network Scope of Work (SOW).

Compliance

Compliance rates continue to rebound after the drop in the last half of 2005 due to the release of the new CMS-2728 form. In order to help facilities with compliance issues, the Network instituted the TOPIC (Telephonic Open Participation and Information Call) initiative, a series of monthly conference calls designed to improve the quality, accuracy, and timeliness of the data that the Network receives. TOPIC is an opportunity for facilities to gain valuable knowledge about CMS forms and requirements, and learn about the most common mistakes that the Network sees on these forms; it also gives facilities an opportunity to ask questions of the Network. During April and August of 2007, the Network #15 Data Department held four TOPICs with facilities on compliance. All facilities were invited to attend the presentations but new facilities and new personnel were especially encouraged to participate. Also, facilities that were identified as failing to maintain an 80% compliance rate were required to attend. For the first time since 2005, the facilities in Network #15 achieved a 90% average compliance rate (Appendix O).

Alpha Testing

Network #15 and three of the Network's dialysis facilities began testing the CROWNWeb system throughout 2007. CROWNWeb is the next generation of data collection software for the ESRD program, and will transform the current CROWN *Application Suite* (VISION, SIMS, and REMIS) into a single Web-based *Application*. Also, rather than Networks being the owners of the data, facilities would take over that responsibility along with the data entry.

Other

In addition to Alpha testing the CROWNWeb software, Network #15 assisted in the creation of the business requirements for the software and the definitions for the Kidney Data Dictionary (KDD). Various Network personnel served on multiple Technical Expert Panels (TEPs) related to the new software.

IV. SANCTION RECOMMENDATIONS

During 2007, Network #15 did not identify any providers as consistently failing to cooperate with Network goals and objectives. A copy of the Network's current Sanction and Alternative Sanctions Policy appears in Appendix Q. This protocol provides several levels of warning and repeated offers of Network technical assistance for solving problems and improving care.

No sanctions against facilities or providers were recommended. The Network continued to monitor forms submission, QA/QI participation, and other outcomes as described in Sections IIIA and IIIB.

V. RECOMMENDATIONS FOR ADDITIONAL FACILITIES

Network #15 shared aggregate data (planning data) with all six state governments and three regional offices encompassed by its territory:

Region	States
Region IX (San Francisco)	Arizona Nevada
Region VIII (Denver)	Colorado Utah Wyoming
Region VI (Dallas)	New Mexico

Network #15 made no specific recommendations for additional or alternative services.

VI. DATA TABLES

The data tables included in the following section are those specified in Attachment J-10 of the CMS/ESRD Network Organization Scope of Work. The data utilized in these tables come from Network #15's SIMS database.

All Tables and Charts refer to Network #15 specific data as of December 31, 2007.