

# END STAGE RENAL DISEASE STATISTICS – NEW ENGLAND

---

The IPRO ESRD Network of New England developed the statistical summary report of the most frequently requested demographic information related to the ESRD patient population in the six New England states. The 2016 statistical report contains data displayed for each of the six states and Network. Several of the tables and figures have trend data.

## HIGHLIGHTS:

### [New ESRD Patients Initiating Dialysis – Page 3](#)

Data are reported by the first outpatient facility providing chronic dialysis. Incidence increased by a 1 percent between 2015 and 2016.

### [Prevalence of ESRD Dialysis Patients by State of Provider – Page 4](#)

In the mid-1990s, an annual increase in the number of dialysis patients was observed at approximately 6 to 9 percent per year. However, the annual prevalence growth in recent years for New England has been around 3 percent, with an increase of 1 percent between 2015 and 2016.

### [Dialysis Patient Characteristics – Page 5](#)

In 2016, 36 percent of dialysis patients have diabetes as their primary cause of renal failure, followed by 17 percent with hypertension. More males (58 percent) than females (42 percent) are on dialysis. More than half of total prevalent patients (52 percent) were age 65 or older.

### [In-center & Home Patients in New England – Pages 6 - 15](#)

Number of patients by dialysis provider is displayed by state.

❑ **ESRD Resources in New England – Page 16**

This table lists the number of ESRD providers and the number of chronic dialysis treatment stations by state and Network.

❑ **Dialysis Prevalence by Modality: State and Network 2013 – Page 17**

This Network has 11.5% of the dialysis population receiving home dialysis. There is a wide variation among the states in the proportion of patients at home. For 2016, the lowest is Rhode Island (5.4%) and the highest is Connecticut 16.3%.

❑ **Transplant Data by Year – Pages 18**

This table reports the number of kidney transplants performed by each transplant center in New England between 1989– 2016.

❑ **Kidney Transplantation by Donor Type – Page 19**

In 2016, 35% of the transplants performed were from living (related and non-related) donors. The percent of deceased donor transplantation is 65%.

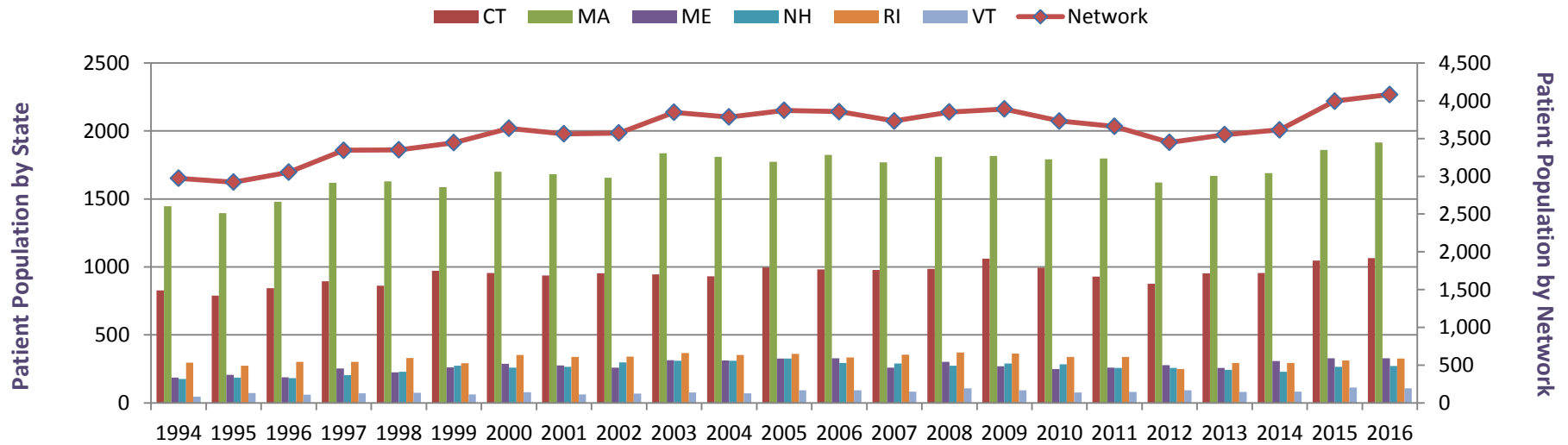
❑ **Dialysis Deaths – Page 20**

The number of patients that died in 2016 showed a little increase from 2015.

❑ **Vocational Rehabilitation – Page 21**

The annual 2016 facility survey indicated that 25% of ESRD patients between the ages of 18–54 received either vocational rehabilitation services, or were full-time or part-time employees, or students. The number of facilities that provide shifts after 5 PM in 2016 was 30%.

## New ESRD Patients Initiating Dialysis by State of Provider 1994 – 2016

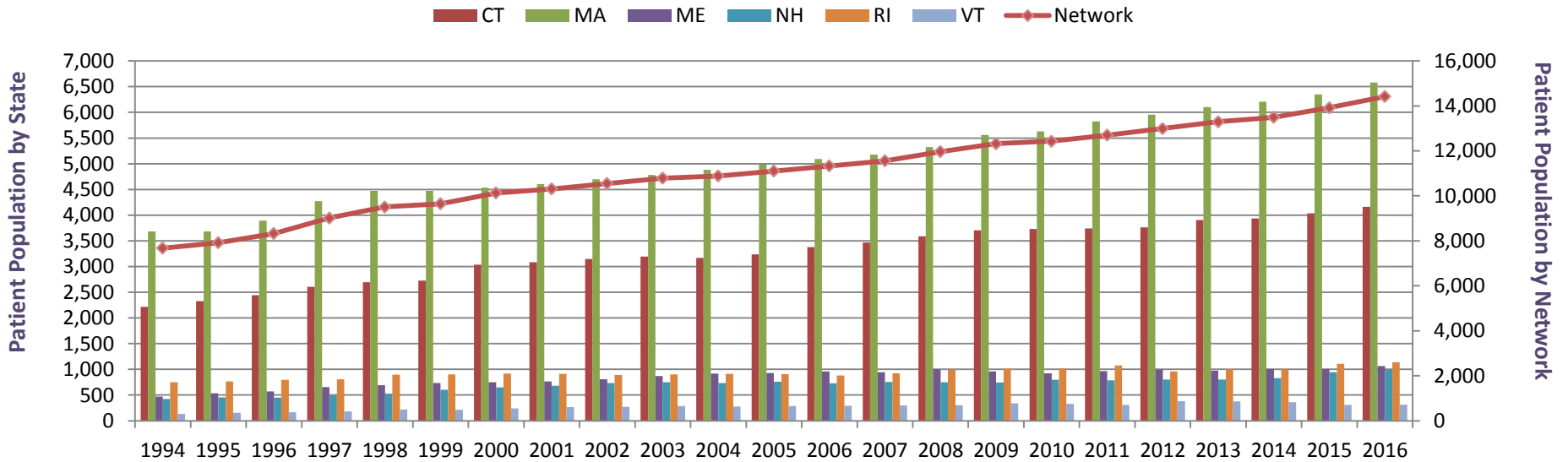


Year	CT	ME	MA	NH	RI	VT	Network	Year	CT	MA	ME	NH	RI	VT	Network*
1994	828	185	1,446	175	295	45	2,974	2006	982	1,825	328	293	335	93	3,856
1995	788	207	1,396	186	274	72	2,923	2007	977	1,770	258	290	355	82	3,732
1996	844	187	1,480	181	302	61	3,055	2008	986	1,811	301	273	371	107	3,852
1997	895	253	1,620	205	301	71	3,345	2009	1,060	1,817	270	289	363	93	3,892
1998	863	225	1,629	228	331	75	3,351	2010	994	1,791	249	284	338	77	3,733
1999	971	261	1,586	274	292	62	3,446	2011	929	1,798	259	257	339	80	3,662
2000	955	288	1,701	260	353	79	3,636	2012	877	1,622	278	256	248	92	3,449
2001	937	276	1,683	266	339	62	3,563	2013	954	1,671	256	242	294	81	3,551
2002	953	258	1,656	298	340	69	3,574	2014	955	1,691	308	228	293	82	3,616
2003	946	313	1,837	309	366	77	3,848	2015	1,047	1,860	328	265	311	113	3,995
2004	932	311	1,810	310	353	70	3,786	2016	1,065	1,919	329	272	327	104	4,085
2005	996	327	1,773	326	360	92	3,874								

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)

\*Includes patients that received treatments in the Network services area, but did not reside in New England.

## Prevalence of ESRD Dialysis Patients by State of Provider 1994 – 2016

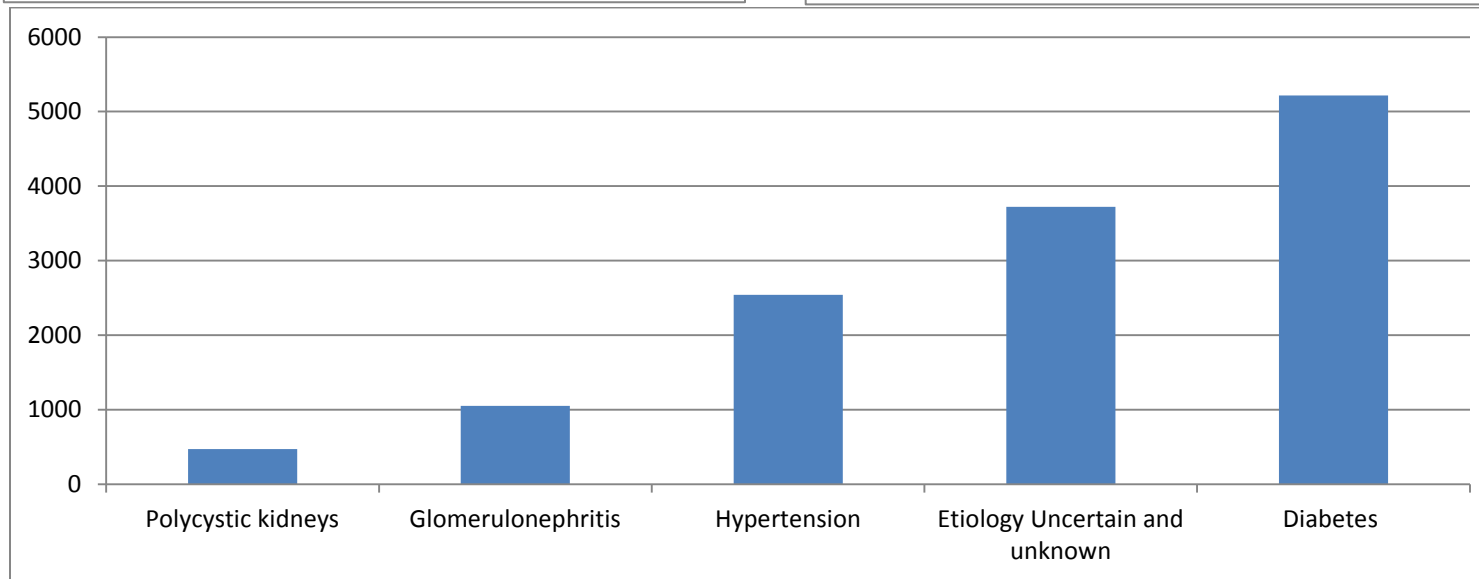
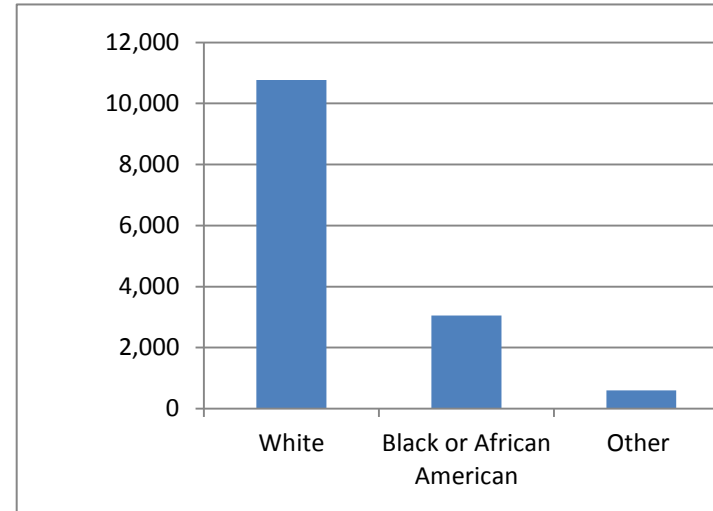
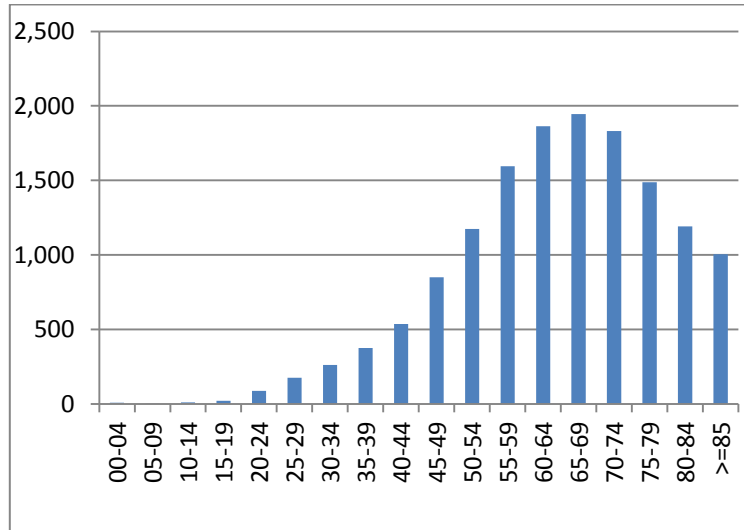


Year	CT	MA	ME	NH	RI	VT	Network	Year	CT	MA	ME	NH	RI	VT	Network*
1994	2,214	3,683	473	421	751	134	7,676	2006	3,377	5,091	958	731	880	291	11,328
1995	2,328	3,683	534	457	764	153	7,919	2007	3,466	5,175	946	754	922	295	11,558
1996	2,442	3,895	572	451	799	165	8,324	2008	3,591	5,325	1,000	747	999	304	11,966
1997	2,607	4,271	655	493	807	182	9,015	2009	3,706	5,559	962	746	1,010	340	12,323
1998	2,696	4,474	690	531	897	221	9,509	2010	3,732	5,631	922	799	1,020	327	12,431
1999	2,725	4,472	732	604	901	213	9,647	2011	3,739	5,825	967	784	1,077	306	12,698
2000	3,035	4,535	752	648	920	241	10,131	2012	3,763	5,957	999	801	960	379	12,996
2001	3,083	4,601	767	682	910	266	10,309	2013	3,902	6,102	974	802	1,002	375	13,297
2002	3,146	4,698	806	732	894	272	10,548	2014	3,934	6,206	1,005	831	1,004	363	13,492
2003	3,196	4,783	870	751	903	288	10,791	2015	4,035	6,347	1,006	946	1,106	308	13,923
2004	3,168	4,880	916	732	913	277	10,886	2016	4,156	6,590	1,065	990	1,144	314	14,415
2005	3,237	4,981	927	758	908	289	11,100								

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)

\*Includes patients that received treatments in the Network services area, but did not reside in New England.

## Dialysis Patient Characteristics in New England Dialysis Population 12/31/16



Source: CROWNWeb (Prepared May 2016)

## ESRD Resources in New England 12/31/16

State	Dialysis Stations*	Percent of Total	Dialysis Providers	Percent of Total	Transplant Centers	Percent of Total
CT	1,000	29.7	50	25.6	2	13.3
ME	255	7.5	18	9.2	1	6.6
MA	1443	42.8	85	43.6	9	60
NH	268	7.9	18	9.2	1	6.6
RI	313	9.3	16	8.2	1	6.6
VT	86	2.5	8	4.1	1	6.6
<b>Totals</b>	<b>3,365</b>	<b>100</b>	<b>195</b>	<b>100</b>	<b>15</b>	<b>100</b>

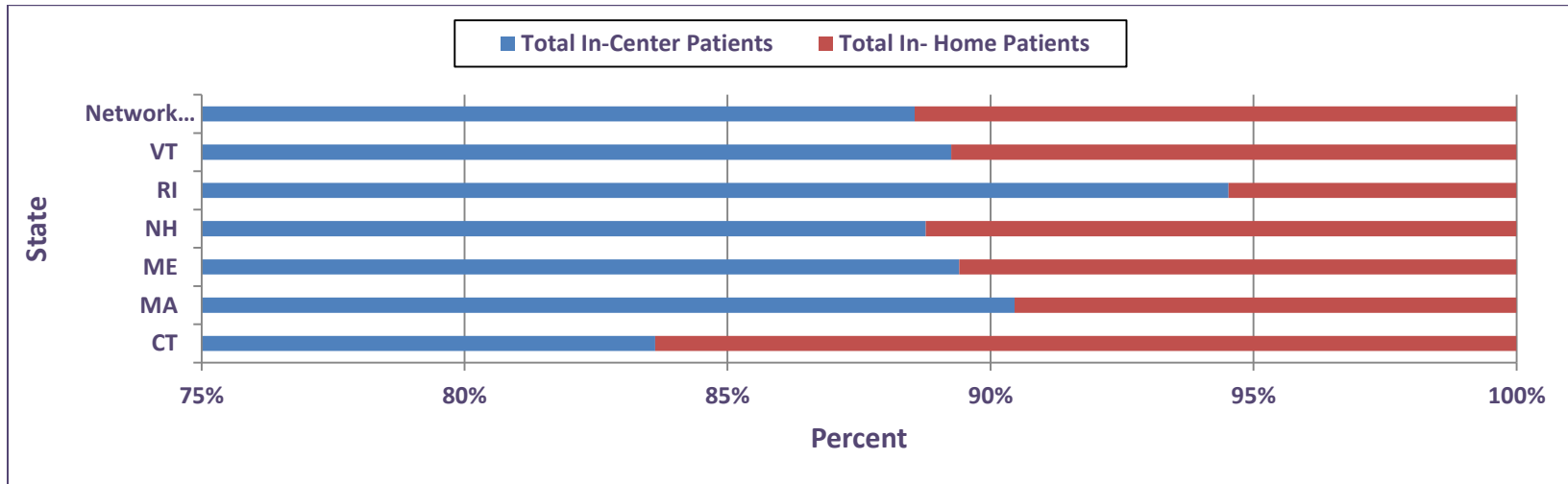
\*New England ESRD (outpatient) dialysis providers and kidney transplant centers are certified by either Medicare or the Veterans Administration Program.

Source: CROWNWeb (Prepared May 2017)

## Dialysis Prevalence by Modality: Provider of Service 2016

State	Hemo	CAPD	CCPD	Other	Total Home	Incenter Hemo	PD	Total In Center	Total In-center and Home
CT	91	128	472	0	691	3,525	3	3,528	4,219
MA	79	99	455	0	633	5,995	4	5,999	6,632
ME	25	16	73	0	114	962	0	962	1,076
NH	21	6	85	0	112	885	0	885	997
RI	4	11	48	0	63	1,088	0	1,088	1,151
VT	14	6	16	0	36	299	0	299	335
Network	234	266	1149	0	1649	12,754	7	12,761	14,410

## In-center Dialysis and Home Dialysis Percentage of Total Patients per State



Source: CROWNWeb (Prepared May 2017)

## Patients Transplanted by Year

Transplant Centers	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Baystate Medical Center	38	29	39	36	26	31	33	39	49	38	38	44	57	39
Beth Israel Medical Center West	55	56	52	55	62	57	56	75	47	n/a	n/a	n/a	n/a	n/a
Beth Israel Medical Center	30	23	28	22	29	30	36	35	40	78	50	57	49	42
Brigham and Women's Hospital	67	60	55	51	59	57	37	41	65	42	39	41	45	44
Children's Hospital	15	14	19	13	16	8	17	20	22	14	15	14	17	23
Dartmouth Hitchcock Medical Ctr.	n/a	n/a	n/a	4	27	23	26	30	20	26	20	21	25	31
Fletcher Allen Health Care Med. Ctr. of VT	15	25	15	0	5	17	27	24	25	22	24	21	6	2
Hartford Hospital	66	58	53	55	76	57	52	64	61	59	56	64	72	71
Lahey Clinic	4	6	13	13	12	17	8	7	14	8	5	9	24	28
Maine Medical Center	41	40	44	31	31	47	33	31	32	50	53	57	83	60
Massachusetts General Hospital	71	71	57	63	50	66	58	55	58	67	65	61	69	69
New England Medical Center	28	33	26	25	21	25	32	31	30	36	42	51	55	60
Rhode Island Hospital	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	34	52	53	63	84	85
University Hospital - BU Medical Ctr.	25	32	23	20	23	25	26	22	29	23	20	26	33	21
University of Mass. Medical Ctr.	25	17	33	27	31	31	34	33	26	35	44	37	47	22
VA Medical Center – Boston	13	15	11	11	4	7	6	13	5	4	9	1	0	n/a
Yale New Haven Hospital	35	46	41	37	43	46	66	60	70	74	72	74	67	86
<b>Network Total</b>	<b>731</b>	<b>682</b>	<b>737</b>	<b>728</b>	<b>772</b>	<b>823</b>	<b>779</b>	<b>719</b>	<b>790</b>	<b>805</b>	<b>735</b>	<b>711</b>	<b>733</b>	<b>683</b>

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)



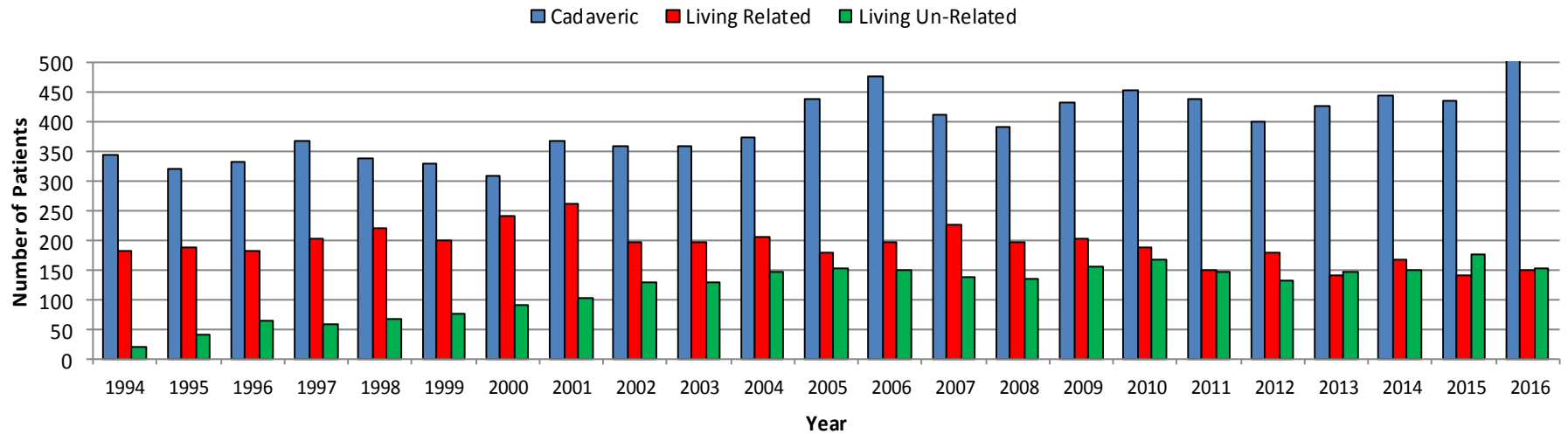
## Patients Transplanted by Year

Transplant Centers	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Baystate Medical Center	32	36	24	32	30	23	33	39	31	27	36	22	20	24
Beth Israel Medical Ctr.	78	79	88	60	69	46	76	61	51	46	68	62	67	63
Brigham and Women's Hospital	53	67	65	100	84	69	64	70	45	53	50	65	61	74
Children's Hospital	19	12	16	16	18	25	24	23	27	23	24	36	26	23
Dartmouth Hitchcock Medical Center	35	36	40	51	52	41	51	56	57	37	34	40	49	41
University of VT Med. Ctr.^	36	23	37	47	41	46	31	42	36	23	25	28	16	24
Hartford Hospital	58	63	67	52	54	52	55	53	43	53	43	55	56	63
Lahey Clinic	33	34	33	44	31	39	32	43	40	43	39	38	23	35
Maine Medical Center	64	60	53	72	58	44	59	41	46	45	38	55	44	36
Massachusetts General Hospital	78	76	102	88	84	86	96	82	76	84	100	117	126	136
New England Medical Center	51	48	38	45	47	36	38	36	42	25	23	37	33	36
Rhode Island Hospital	68	71	72	67	46	38	52	49	49	66	42	62	46	61
University Hospital – BU Medical Ctr.	20	33	50	39	51	50	49	49	55	50	51	34	38	53
UMass. Memorial Healthcare Systems+	39	29	29	29	40	24	38	36	27	30	32	51	46	50
Yale New Haven Hospital	73	61	58	81	74	100	92	125	110	106	108	101	105	144
<b>Network Total</b>	<b>737</b>	<b>728</b>	<b>772</b>	<b>823</b>	<b>779</b>	<b>719</b>	<b>790</b>	<b>805</b>	<b>735</b>	<b>711</b>	<b>713</b>	<b>803</b>	<b>756</b>	<b>863</b>

^ Previously Fletcher Allen Health Care Med. Ctr. of VT; + Previously University of Mass. Medical Ctr.

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)

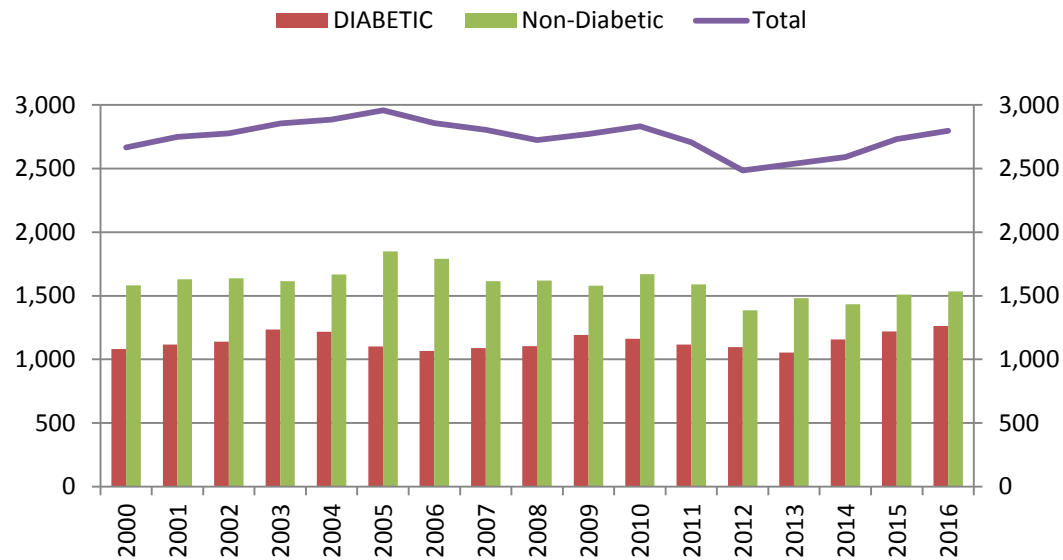
## Renal Transplants by Donor Type All Transplant Centers in New England 1994-2016



Year	Cadaveric	Living Related	Living Un-Related	Total	Year	Cadaveric	Living	Living Un-Related	Total
1994	344	181	19	544	2006	477	198	150	825
1995	320	187	40	547	2007	414	227	139	780
1996	332	183	65	580	2008	392	196	134	722
1997	368	202	57	627	2009	432	202	156	790
1998	340	220	68	628	2010	453	189	168	810
1999	330	200	75	605	2011	439	149	147	735
2000	308	242	91	641	2012	401	178	131	710
2001	368	262	103	733	2013	426	142	148	716
2002	358	197	128	683	2014	445	166	149	803
2003	358	197	128	739	2015	437	142	177	756
2004	374	206	148	728	2016	561	150	152	863
2005	440	180	152	772					

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)

## Dialysis Patient Deaths



PATIENT DEATHS				PATIENT DEATHS			
Year	DIABETIC	NON-DIABETIC	TOTAL	Year	DIABETIC	NON-DIABETIC	TOTAL
2000	1,081	1,583	2,665	2009	1,191	1,579	2,770
2001	1,118	1,630	2,748	2010	1,161	1,671	2,832
2002	1,139	1,638	2,777	2011	1,116	1,590	2,706
2003	1,234	1,615	2,853	2012	1,097	1,387	2,484
2004	1,217	1,668	2,885	2013	1,055	1,481	2,536
2005	1,102	1,848	2,956	2014	1,158	1,433	2,591
2006	1,067	1,790	2,857	2015	1,221	1,509	2,730
2007	1,090	1,614	2,804	2016	1,263	1,537	2,800
2008	1,103	1,620	2,723				

Source: Standard Information Management System (SIMS) and CROWNWeb (2012 onwards) (Prepared May 2017)

## Vocational Rehabilitation by State for 2016

State	Number of Dialysis Patients Aged 18 through 54	Patients Receiving Services from Vocational Rehab	Patients Employed Full-Time or Part-Time	Patients Attending School Full-Time or Part-Time	Shift After 5PM
CT	1,087	9	273	13	9
MA	1,545	9	349	20	34
ME	237	2	50	1	6
NH	238	2	56	1	6
RI	295	3	61	2	2
VT	66	0	17	0	3
Network	3,468	25	806	37	60

Source: CROWNWeb (Prepared May 2017)