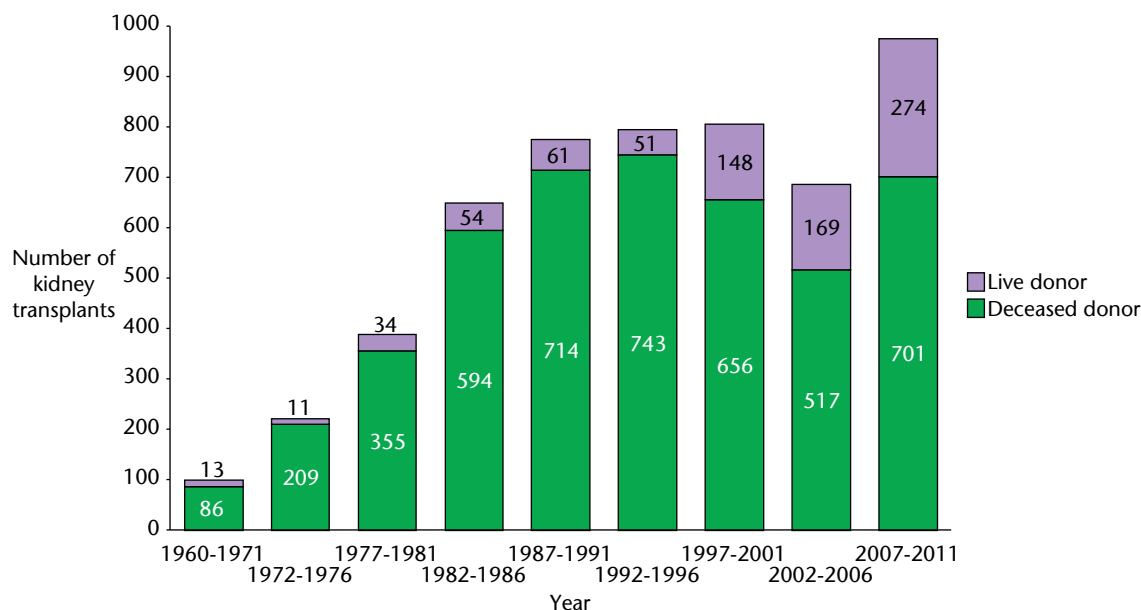


SECTION D KIDNEY TRANSPLANTATION

D1 Frequency of kidney transplantation in Scotland

D1.1 Frequency and donor type, kidney transplants performed in Scotland 1960-2011



Between 1960 and 31 December 2011, 5390 kidney transplants were performed in Scotland in 4536 patients.

4512 first kidney transplants were performed, 718 second transplants, 137 third transplants and 23 patients received a fourth or subsequent kidney transplant.

156 patients received a simultaneous transplant of another organ at the same time as a kidney (143 pancreas, 11 liver, 2 heart).

Kidney transplants performed outside of Scotland are excluded.

D1.2 Age of patients at the time of kidney transplantation

Year of transplant	First kidney transplants				Second and subsequent transplants			
	n	Mean Age	SD	Age Range	n	Mean Age	SD	Age Range
1960-1971	94	30.2	11.9	8.0 - 64.8	5	33.5	3.9	15.7 - 25.0
1972-1976	194	33.9	11.8	10.1 - 64.3	26	33.5	10.4	11.6 - 55.2
1977-1981	323	36.8	12.8	8.5 - 67.0	66	33.4	9.6	15.6 - 56.3
1982-1986	521	38.8	15.1	2.3 - 77.6	127	35.5	12.3	3.4 - 68.9
1987-1991	646	40.9	15.8	0.3 - 75.2	129	36.3	13.5	5.1 - 69.5
1992-1996	665	42.6	15.7	2.1 - 76.2	129	36.8	12.5	3.9 - 66.1
1997-2001	666	42.0	15.5	4.0 - 85.1	138	38.9	12.0	5.2 - 71.3
2002-2006	568	43.4	15.1	4.2 - 78.1	118	39.2	11.0	16.4 - 39.2
2007-2011	835	45.9	15.3	2.4 - 78.5	140	43.7	11.2	18.2 - 69.2

D1.3 Year of first kidney transplant and diagnosis group

Year of transplant	Glomerulonephritis		Interstitial		Multisystem		Diabetes		Unknown	
	n	%	n	%	n	%	n	%	n	%
1960-1971*	38	40.4	27	28.7	9	9.6	0		19	20.4
1972-1976	85	43.8	70	36.1	18	9.3	0		21	10.8
1977-1981	123	38.1	136	42.1	36	11.1	5	1.5	23	7.1
1982-1986	145	27.8	213	40.9	64	12.3	39	7.5	60	11.5
1987-1991	188	29.1	237	36.7	94	14.6	46	7.1	81	12.5
1992-1996	191	28.7	241	36.2	91	13.7	77	11.6	65	9.8
1997-2001	178	26.7	251	37.7	83	12.5	64	9.6	90	13.5
2002-2006	141	24.8	202	35.6	66	11.6	83	14.6	76	13.4
2007-2011	181	21.7	331	39.6	100	12.0	109	13.1	114	13.7

* One patient who received a first kidney transplant between 1960-1971 has missing PRD

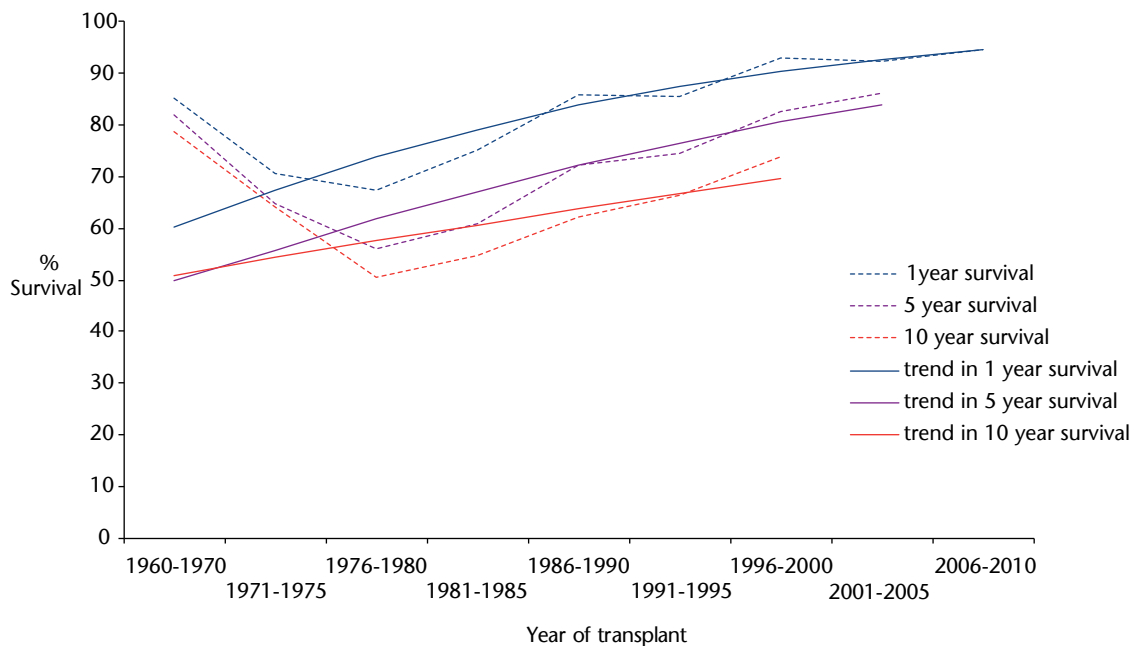
D2 Transplanted Kidney Survival

D2.1 Graft survival of first kidney transplants by year of transplantation 1960 - 2010			
Year of transplant	% grafts surviving 1 year	% grafts surviving 5 years	% grafts surviving 10 years
1960-1970	83.7	79.1	76.7
1971-1975	71.5	66.2	65.6
1976-1980	67.7	57.3	51.2
1981-1985	74.7	59.9	53.6
1986-1990	86.0	71.9	62.0
1991-1995	85.3	73.9	66.4
1996-2000	92.5	83.5	75.3
2001-2005	92.6	86.5	
2006	97.2	89.6	
2007	91.7		
2008	92.8		
2009	97.2		
2010	94.8		

Survival of first kidney transplants only is shown in the table.

Grafts with insufficient follow-up and those that did not fail in patients dying within the relevant period have been excluded from the table.

D2.2 Trends in first graft survival by year of transplantation 1960-2010



Trend in 1 year survival: year to year OR 1.06 (95% CI 1.05 - 1.07)

Trend in 5 year survival: year to year OR 1.05 (95% CI 1.04 - 1.06)

Trend in 10 year survival: year to year OR 1.03 (95% CI 1.02 - 1.04)

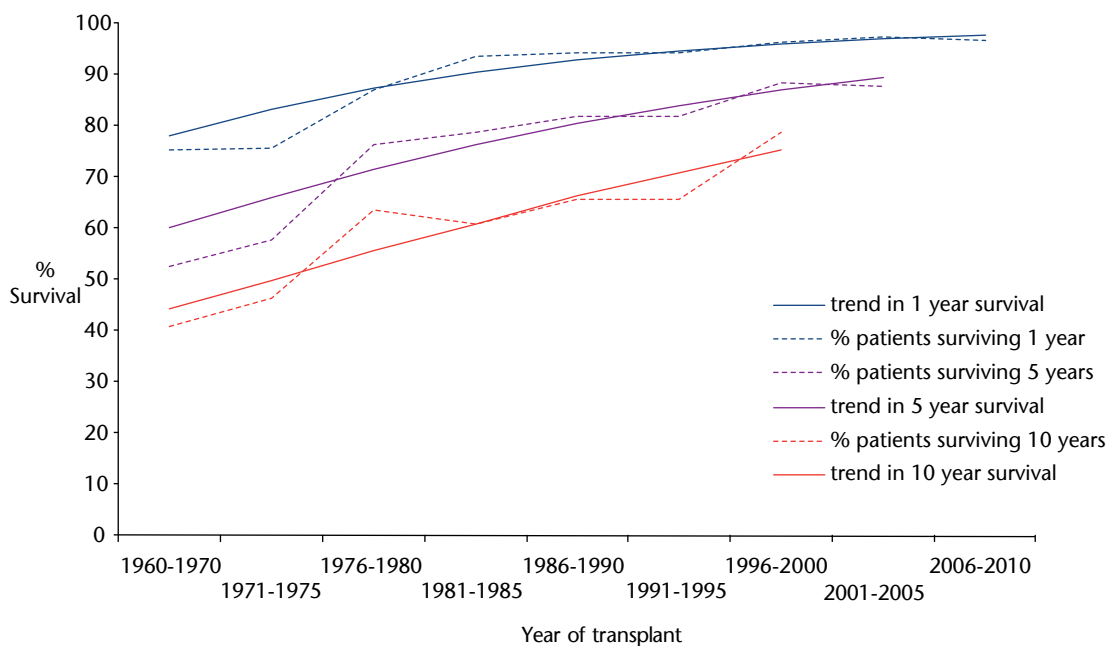
The trends in 1 year, 5 years and 10 years patient survival are all statistically significant (Wald-statistic,df=1,p<0.001).

D3 Patient survival after Kidney Transplantation

D3.1 Patient survival after first kidney transplant by year of transplantation 1960-2010			
Year of transplant	% patients surviving 1 year	% patients surviving 5 years	% patients surviving 10 years
1960-1970	72.1	51.2	39.5
1971-1975	74.2	58.3	47.7
1976-1980	88.3	76.5	62.5
1981-1985	93.2	78.0	59.9
1986-1990	94.4	82.0	65.1
1991-1995	93.6	79.9	63.2
1996-2000	96.2	87.8	78.1
2001-2005	97.3	87.2	
2006	97.2	88.7	
2007	98.1		
2008	98.9		
2009	92.1		
2010	97.4		

Patient survival is reported from the time of first kidney transplant. Those with insufficient follow-up are excluded.

D3.2 Trends in patient survival by year of first kidney transplant 1960 -2010



Trend in 1 year survival: year to year OR 1.07 (95% CI 1.05 - 1.08)

Trend in 5 year survival: year to year OR 1.05 (95% CI 1.04 - 1.06)

Trend in 10 year survival: year to year OR 1.04 (95% CI 1.03 - 1.05)

The trends in 1 year, 5 years and 10 years patient survival are all statistically significant (Wald-statistic,df=1,p<0.001).

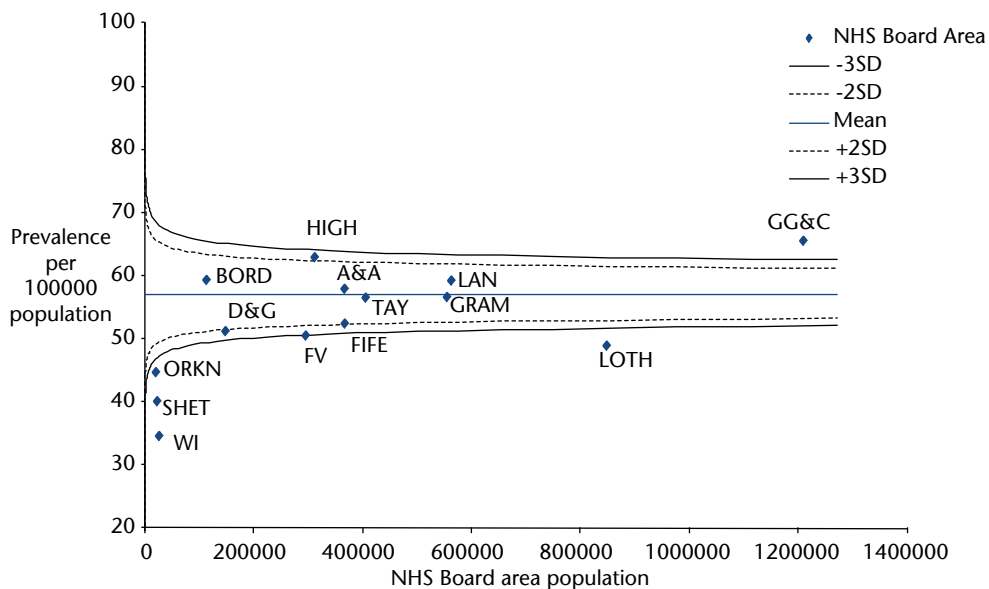
D4 Listing for Kidney Transplantation

D4.1 Percentage and prevalence per 10000 population of RRT patients with functioning kidney transplant or on transplant waiting list 31 December 2011 by NHS Board area of residence

	All RRT patients 31/12/2011	Patients with kidney transplant		Transplant or transplant listed		NHS Board population	Prevalence per 10000 population
		n	%	n	%		
A&A	354	151	42.7	212	59.9	366890	57.8
BORD	104	47	45.2	67	64.4	113150	59.2
D&G	118	56	47.5	76	64.4	148060	51.1
FIFE	322	139	43.2	192	59.7	367292	52.3
FV	234	105	44.9	149	64.1	295541	50.4
GG&C	1091	579	53.1	791	72.5	1210254	65.4
GRAM	466	235	50.4	314	67.4	555280	56.5
HIGH	280	162	57.9	196	70.0	311960	62.8
LAN	465	264	56.8	333	71.6	563185	59.1
LOTH	568	320	56.3	414	72.9	848727	48.8
ORKN	17	8	14.7	9	53.0	20160	44.6
SHET	12	7	58.3	9	75.0	22500	40.0
TAY	374	177	47.3	229	61.2	405721	56.4
WI	17	7	41.2	9	52.9	26080	34.5
Scotland	4422	2257	51.0	3001	67.9	5254800	57.1

The percentage of patients in each NHS Board area treated by all forms of RRT (PD, HD, Transplant) who are either on the transplant waiting list or have a functioning transplant are shown. Patients who were on the transplant waiting list but had suspended rather than active status are included.

D4.2 Prevalence per 100000 population of RRT patients with functioning kidney transplant or on transplant waiting list 31 December 2011 by NHS Board area of residence



ORKN, SHET, WI and LOTH all have a prevalence of transplanted or transplant listed populations more than 3SD below the Scottish average.

GG&C prevalence per 100000 population is more than 3SD above the mean. However both LOTH and GG&C have a high proportion (>72%) of prevalent RRT patients who have a kidney transplant or are on the national kidney transplant waiting list as shown in D4.1.