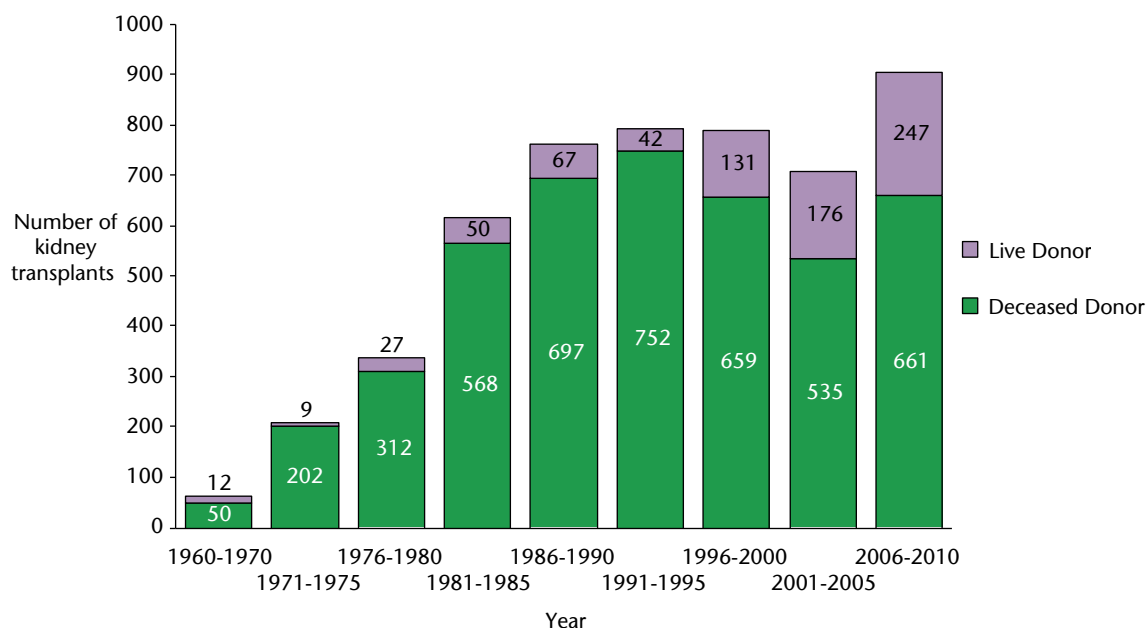


Section D KIDNEY TRANSPLANTATION

D1 Frequency of kidney transplantation in Scotland

D1.1 Frequency and donor type, kidney transplants performed in Scotland 1960-2010



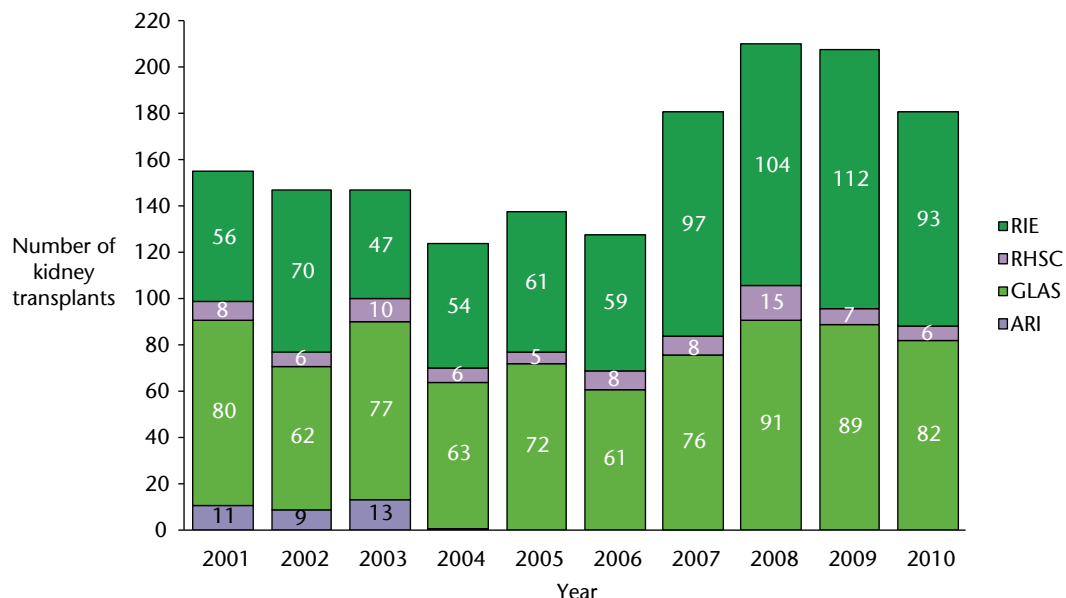
Between 1960 and 31 December 2010, 5197 kidney transplants were performed in Scotland in 4374 patients.

4351 first kidney transplants were performed, 693 second transplants, 132 third and 21 patients received a fourth transplant.

142 patients received a simultaneous transplant of another organ at the same time as their kidney transplant (130 pancreas, 10 liver, 2 heart).

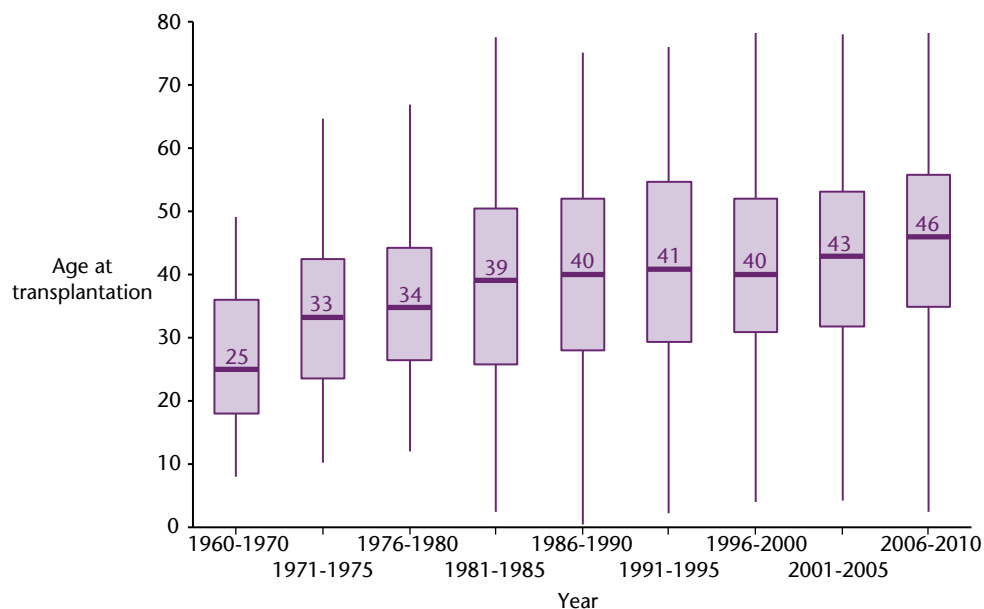
Kidney transplants performed outside of Scotland are excluded.

D1.2 Frequency of kidney transplants by unit performing transplant 2001-2010



The last kidney transplant performed in ARI was in January 2004.

D1.3 Median age of patients at the time of kidney transplantation 1960-2010



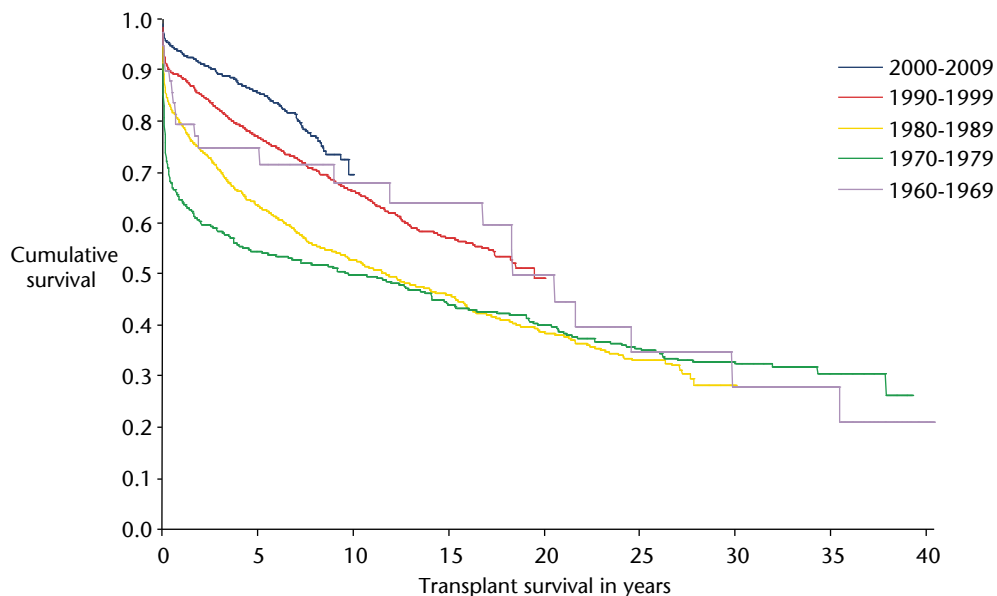
D1.4 Number of patients with first kidney transplant 1960-2010 in each diagnosis group

Year band	Glomerulonephritis	Interstitial	Multisystem	Diabetes	Unknown	Total
1960-1970	25	14	4	0	14	58*
1971-1975	86	64	16	0	22	188
1976-1980	108	121	33	3	20	285
1981-1985	141	222	57	32	57	509
1986-1990	181	228	94	45	78	626
1991-1995	195	237	93	68	67	660
1996-2000	180	251	79	70	73	653
2001-2005	150	197	73	81	92	593
2006-2010	158	323	96	100	102	779

* One patient who received a first kidney transplant between 1960-1970 has missing PRD.

D2 Transplanted Kidney Survival

D2.1 Transplanted kidney survival by decade of transplantation 1960-2010



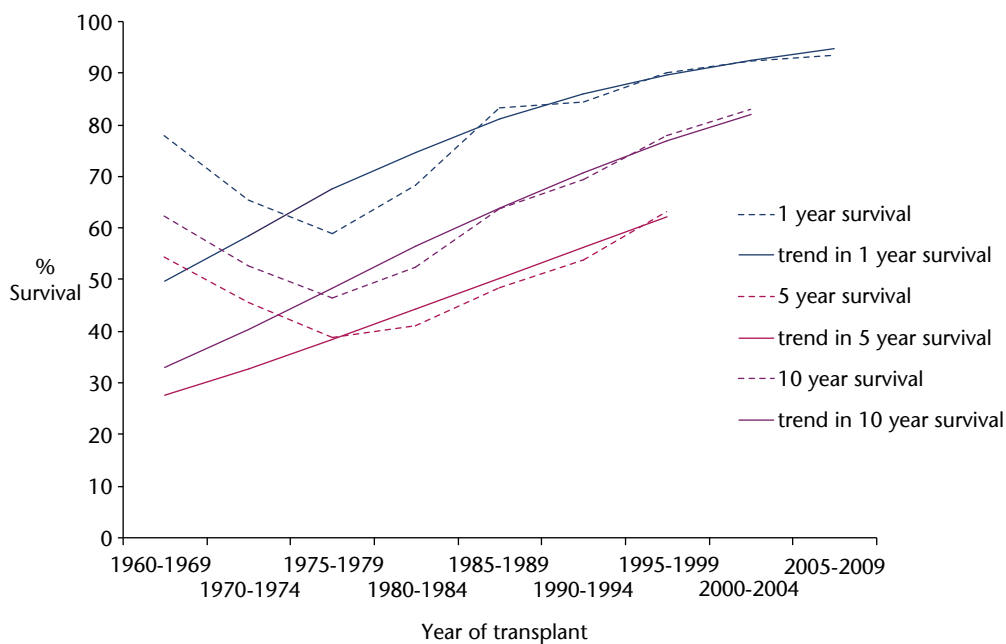
The survival curves demonstrate the transplanted organ survival, so called 'graft survival' not the survival of the patients receiving the transplant.

Patients are censored in the analysis if they died with a functioning transplant, and on 31 December 2010.

D2.2 Graft survival by year of transplantation 1960-2009			
Year of transplant	% grafts surviving 1 year	% grafts surviving 5 years	% grafts surviving 10 years
1960-1969	78.1	62.5	54.5
1970-1974	65.5	52.8	45.6
1975-1979	59.2	46.7	39.0
1980-1984	68.5	52.5	41.2
1985-1989	83.4	63.8	48.5
1990-1994	84.7	69.4	54.0
1995-1999	90.1	78.2	63.3
2000-2004	92.6	83.1	
2005	94.2		
2006	95.2		
2007	91.6		
2008	92.9		
2009	96.4		

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

D2.3 Trends in graft survival by year of transplantation 1960-2009



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

Trend in 5 year survival: year to year OR 1.07 (95%CI 1.06-1.08).

Trend in 10 year survival: year to year OR 1.04 (95%CI 1.03-1.06).

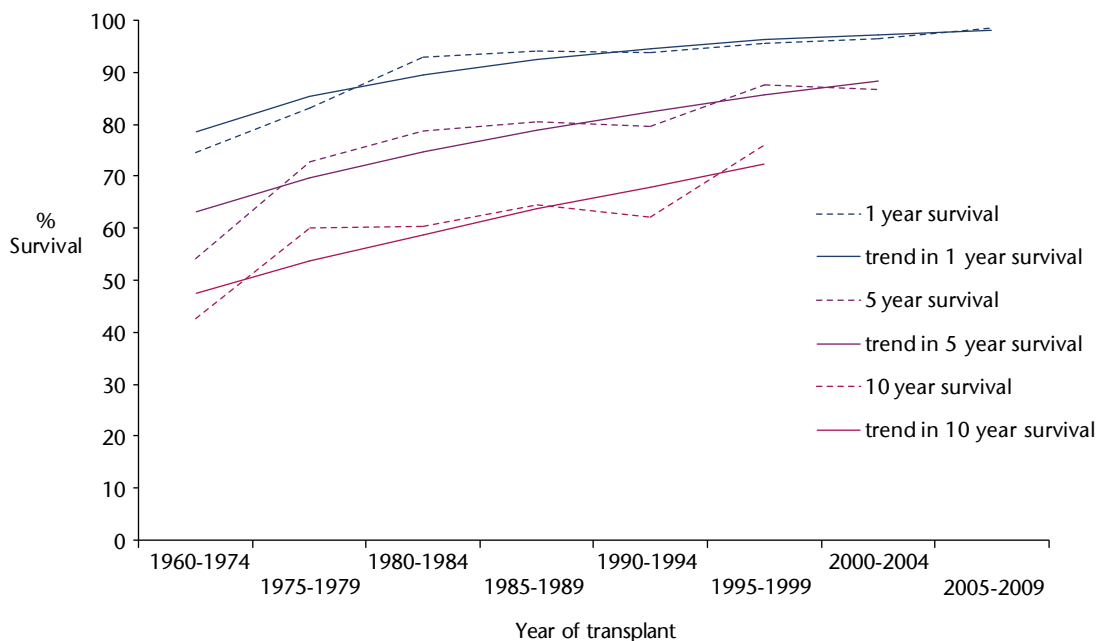
The trends for improved graft survival at 1 year, 5 years and 10 years are all statistically significant (Wald-statistic, df=1, p<0.001).

D3 Patient survival after Kidney Transplantation

D3.1 Patient survival by year of first kidney transplant 1960-2009			
Year of transplant	% patients surviving 1 year	% patients surviving 5 years	% patients surviving 10 years
1960-1969	75.0	47.5	40.0
1970-1974	74.5	55.3	42.9
1975-1979	83.3	72.9	60.1
1980-1984	93.1	78.7	60.6
1985-1989	94.2	80.5	64.6
1990-1994	94.0	79.8	62.4
1995-1999	95.8	87.6	76.0
2000-2004	96.7	87.0	
2005	99.1		
2006	98.1		
2007	98.1		
2008	98.9		
2009	92.7		

Patient survival is reported from the time of their first kidney transplant. Patients with insufficient follow-up have been excluded from this table.

D3.2 Trends in patient survival by year of first kidney transplant 1960-2009



Trend in 1 year survival: year to year OR 1.08 (95%CI 1.06-1.09).

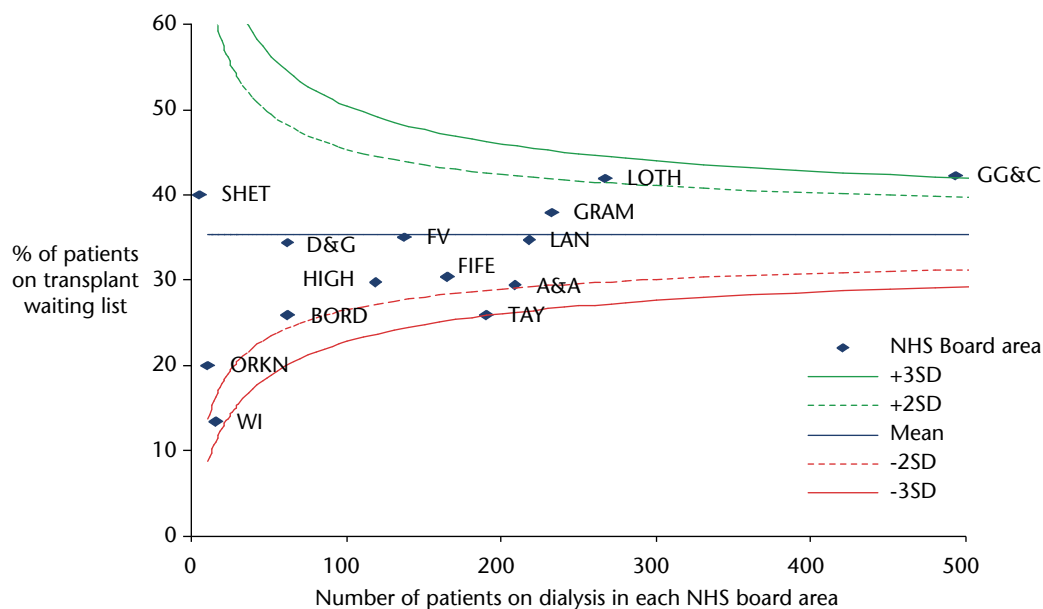
Trend in 5 year survival: year to year OR 1.05 (95%CI 1.04-1.06).

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

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

D4 Listing for Kidney Transplantation

D4.1 Percentage of prevalent dialysis patients on transplant waiting list 31 December 2010 by NHS Board area of residence



The percentage of patients treated by any form of dialysis (PD, hospital or home HD) on 31 December 2010, who were on the UK national kidney transplant waiting list on the same date are shown. Patients who were on the waiting list but had suspended rather than active status are included. Patients treated by kidney transplant on 31 December 2010 and who were also on the waiting list for a further transplant are excluded.

D4.2 Frequency of first kidney transplants and time from start of RRT to activation on transplant waiting list by NHS Board area of residence at transplantation 2001-2010						
	Pre-emptive transplants (number DD)	LD transplant within 1 year (never listed)	Number of transplants with listing date*	Median duration from start RRT to listing (days)	Lower quartile	Upper quartile
A&A	3 (2)	3	86	308	163	636
BORD	1 (0)	0	24	25	-131	516
D&G	3 (2)	3	39	200	85	319
FIFE	10 (6)	1	84	65	-56	274
FV	8 (2)	10	51	241	146	377
GG&C	35 (8)	16	289	197	105	394
GRAM	11 (2)	5	121	133	42	352
HIGH	8 (2)	2	72	96	12	299
LAN	9 (3)	3	127	286	155	460
LOTH	17 (6)	6	191	101	-76	364
ORKN	0	0	7	145	24	527
SHET	0	1	3	297	-	-
TAY	11 (6)	6	90	58	-34	248
WI	2 (2)	0	4	41	-93	143
Scotland	118 (41)	56	1188	175	30	381

* All patients who received a pre-emptive LD transplant are excluded.

Four patients transplanted in Scotland during this time period were not Scottish residents and are excluded from the analyses.

Of the 77 live donor (LD) pre-emptive transplants in Scotland between 2001-2010 only 27 (35%) were ever listed on the UK national transplant waiting list. All LD transplant recipients are excluded from the time to listing analyses. Deceased donor (DD) pre-emptive transplant recipients are included.

Of the 1291 patients who did not receive a LD pre-emptive transplant a date of listing for their first transplant was not available for 103 (8%). However 89 (86%) of those patients received a LD transplant, of whom 56 received their LD transplant within 1 year of starting RRT.

The UKRA guide line is that patients with progressive deterioration in renal function suitable for transplantation should be placed on the national transplant list within six months (-182.5 days) of their anticipated dialysis start date.