

# QUALITY OF LIFE ASSESSMENT

## (Karnovsky Scale)

The current method of activity based assessment of quality of life is to be discontinued. An appropriate simple repetitive relevant method has yet to be chosen. This will be the last Karnovsky based report, a decision based on the difficulties of making comparative judgements of baseline activity levels to be expected according to age, on the tendency to

home haemodialysis, 3% CAPD and satellite haemodialysis, 8% hospital haemodialysis. In the age group 45-64 years, dependence on others for considerable assistance (code 10-59) was limited to 1% home and 5% satellite haemodialysis, 6% CAPD, 12% hospital haemodialysis.

**Figure 101**

### Quality of Life 1994 - 1998

**Australia**

	1994	1995	1996	1997	1998
<b>25 - 44 years</b>					
Normal / mild effort (Code 90-100)	69%	67%	70%	67%	66%
Moderate effort (Code 80-89)	19%	19%	27%	19%	21%
Care for self (Code 60-79)	9%	10%	10%	11%	9%
Disabled (Code 10-59)	3%	4%	3%	3%	4%
<b>45 - 64 years</b>					
Normal / mild effort (Code 90-100)	49%	51%	51%	54%	48%
Moderate effort (Code 80-89)	25%	27%	24%	23%	26%
Care for self (Code 60-79)	19%	16%	18%	17%	20%
Disabled (Code 10-59)	7%	6%	7%	6%	6%
<b>65 - 84 years</b>					
Normal / mild effort (Code 90-100)	29%	31%	30%	31%	26%
Moderate effort (Code 80-89)	30%	28%	27%	27%	27%
Care for self (Code 60-79)	30%	30%	31%	30%	34%
Disabled (Code 10-59)	11%	11%	12%	12%	13%

rate most patients in a narrow range of activity and on the limited use of patient rating of their activity.

Over the last five years there has been no material trend in any of the three age groups (25-44 years, 45-64 years and 65-84 years).

## AUSTRALIA

### DIALYSIS DEPENDENT

See Figures 102 to 104.

In the main, those self-dialysing with home haemodialysis had better activity ratings than those in a satellite haemodialysis centre or self dialysis with CAPD at home. Hospital haemodialysis patients were less active in each age group.

Very limited activity (code 10-59) was reported in only a small proportion of young patients: (<1%)

For young patients, 25-44 years, normal effort with home haemodialysis (78%) was distinctly more common than for those in a satellite haemodialysis centre (66%) or at home with CAPD (67%). This difference in favour of home haemodialysis was retained in both the middle-aged 45-64 years, and the elderly 65-84 years.

While there were not many elderly patients capable of normal activity, all but a small group would care for themselves, or manage daily activities with moderate effort.

### TRANSPLANT DEPENDENT

See Figures 102 and 105.

Once again there was no notable change from the high levels of capability for normal activity without excess effort which were previously reported for most patients with a functioning transplant.

## NEW ZEALAND

### DIALYSIS DEPENDENT

See Figures 106 and 107.

Fifty six percent of all patients were capable of near normal activity. A further 24% required moderate effort, and 11% were capable of self-care.

In relation to age and type of dialysis (Figure 107) the level of effort understandably declined especially amongst those requiring hospital based dialysis.

### TRANSPLANT DEPENDENT

See Figure 106.

Ninety two percent were capable of near normal effort, 2% were capable only of self-care.

## AUSTRALIA AND NEW ZEALAND

Quality of Life of Age Groups 25-44 years and 45-64 years: Diabetic and Racial Classification. See Figures 108 and 109.

In these age groups there was a much lower level of independence amongst those with diabetic nephropathy compared to non-diabetics. Many of the diabetic patients were capable only of care for self.

Figure 102

Australia

### Quality of Life Assessment 31-Mar-98

Mode of Treatment	100	90	80	70	60	50	40	30	20	10	00	Total
<b>Dialysis</b>												
PD Hospital	1	3	5	3	0	3	4	1	0	0	0	20
PD Home	25	64	34	14	15	16	5	1	1	0	0	175
PD Satellite	0	0	0	0	0	0	0	0	0	0	0	0
HD Hospital	126	370	354	267	173	117	55	12	12	6	0	1492
HD Home	154	268	124	45	19	9	3	0	0	0	0	622
HD Satellite	144	487	413	245	93	75	14	1	2	2	0	1476
CAPD Hospital	4	8	4	9	1	6	1	6	3	0	0	42
CAPD Home	168	476	362	155	118	68	19	7	5	1	0	1379
<b>Total</b>	<b>622</b>	<b>1676</b>	<b>1296</b>	<b>738</b>	<b>419</b>	<b>294</b>	<b>101</b>	<b>28</b>	<b>23</b>	<b>9</b>	<b>0</b>	<b>5206</b>
	<b>12%</b>	<b>32%</b>	<b>25%</b>	<b>14%</b>	<b>8%</b>	<b>7%</b>	<b>2%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>0</b>	<b>100%</b>
<b>Functioning Transplants</b>	<b>2254</b>	<b>1760</b>	<b>453</b>	<b>136</b>	<b>54</b>	<b>25</b>	<b>10</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>4709</b>
	<b>48%</b>	<b>37%</b>	<b>10%</b>	<b>3%</b>	<b>1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>100%</b>
<b>Total</b>	<b>2876</b>	<b>3436</b>	<b>1749</b>	<b>874</b>	<b>473</b>	<b>319</b>	<b>111</b>	<b>31</b>	<b>27</b>	<b>10</b>	<b>9</b>	<b>9915</b>
	<b>29%</b>	<b>35%</b>	<b>18%</b>	<b>9%</b>	<b>5%</b>	<b>3%</b>	<b>1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>100%</b>

100 Normal: no complaints, no evidence of disease.  
 90 Able to carry on normal activity, minor signs or symptoms of disease.  
 80 Normal activity with effort; moderate signs or symptoms of disease.  
 70 Care for self; unable to carry on normal activity or do active work.  
 60 Requires occasional assistance but able to care for most needs.  
 50 Requires considerable assistance and frequent medical care.

40 Disabled; requires special medical care and assistance.  
 30 Severely disabled; hospital care indicated, death not imminent.  
 20 Very sick, hospital care needed.  
 10 Moribund. Fatal process progressing rapidly.  
 00 Unknown or lost to follow up.

**Figure 103**

**Australia**

**Quality of Life of Dialysis Patients 1994 to 31-Mar-98**

Categories	1994	1995	1996	1997	1998
100 Normal; no complaints, no evidence of disease.	12%	12%	12%	12%	12%
90-99 Able to carry on normal activity, minor signs or symptoms of disease.	37%	36%	37%	37%	32%
80-89 Normal activity with effort; moderate signs or symptoms of disease.	25%	25%	23%	23%	25%
70-79 Care for self; unable to carry on normal activity or do active work.	12%	12%	13%	13%	14%
60-69 Requires occasional assistance but able to care for most needs.	7%	7%	7%	7%	8%
50-59 Requires considerable assistance and frequent medical care.	5%	5%	5%	5%	7%
40-49 Disabled; requires special medical care and assistance.	1%	1%	2%	2%	2%
30 Severely disabled, hospital care indicated but death not imminent.	<1%	<1%	<1%	<1%	<1%
20 Very sick, hospital care needed.	<1%	<1%	<1%	<1%	<1%
10 Moribund. Fatal process progressing rapidly.	<1%	<1%	<1%	<1%	<1%
00 Unknown or lost to follow up.	0%	0%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Figure 104**

**Australia**

**Quality of Life Related to Age and Method of Dialysis 31-Mar-98**

	CAPD	IPD/CCPD	Home HD	Hosp. HD	Sat. HD	Total
<b>25 - 44 years n=</b>	(239)	(40)	(214)	(242)	(343)	<b>(1078)</b>
Normal / mild effort (Code 90-100)	67%	55%	78%	54%	66%	<b>66%</b>
Moderate effort (Code 80-89)	20%	13%	18%	23%	23%	<b>21%</b>
Care for self (Code 60-79)	10%	15%	4%	15%	8%	<b>9%</b>
Disabled (Code 10-59)	3%	17%	<1%	8%	3%	<b>4%</b>
<b>45 - 64 years n=</b>	(524)	(71)	(306)	(522)	(581)	<b>(2004)</b>
Normal / mild effort (Code 90-100)	52%	48%	68%	36%	45%	<b>48%</b>
Moderate effort (Code 80-89)	26%	28%	21%	26%	29%	<b>26%</b>
Care for self (Code 60-79)	16%	14%	10%	26%	21%	<b>20%</b>
Disabled (Code 10-59)	6%	10%	1%	12%	5%	<b>6%</b>
<b>65 - 84 years n=</b>	(624)	(49)	(81)	(671)	(513)	<b>(1938)</b>
Normal / mild effort (Code 90-100)	32%	27%	37%	21%	23%	<b>26%</b>
Moderate effort (Code 80-89)	28%	18%	23%	23%	31%	<b>27%</b>
Care for self (Code 60-79)	28%	29%	31%	39%	36%	<b>34%</b>
Disabled (Code 10-59)	12%	27%	9%	17%	10%	<b>13%</b>

n = Number of Patients

**Figure 105**

**Australia**

**Quality of Life of Transplant Patients 1994 to 31-Mar-98**

Categories	1994	1995	1996	1997	1998
100 Normal; no complaints, no evidence of disease.	54%	52%	51%	50%	48%
90-99 Able to carry on normal activity, minor signs or symptoms of disease.	31%	33%	35%	36%	37%
80-89 Normal activity with effort; moderate signs or symptoms of disease.	10%	10%	9%	9%	10%
70-79 Care for self; unable to carry on normal activity or do active work.	2%	3%	2%	6%	3%
60-69 Requires occasional assistance but able to care for most needs.	1%	<1%	1%	1%	1%
50-59 Requires considerable assistance and frequent medical care.	1%	<1%	1%	<1%	<1%
40-49 Disabled; requires special medical care and assistance.	<1%	<1%	<1%	<1%	<1%
30 Severely disabled, hospital care indicated but death not imminent.	<1%	<1%	<1%	<1%	<1%
20 Very sick, hospital care needed.	<1%	<1%	<1%	0%	<1%
10 Moribund. Fatal process progressing rapidly.	<1%	<1%	<1%	<1%	<1%
00 Unknown or lost to follow up.	<1%	<1%	<1%	<1%	<1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Figure 106**

**New Zealand**

**Quality of Life Assessment 31-Mar-98**

Mode of Treatment	100	90	80	70	60	50	40	30	20	10	00	Total
<b>Dialysis</b>												
PD Hospital	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
PD Home	6	18	5	2	1	3	0	0	0	0	0	<b>35</b>
HD Hospital	31	59	75	37	16	8	4	2	1	0	0	<b>233</b>
HD Home	74	64	33	12	6	2	0	1	0	0	0	<b>192</b>
HD Satellite	3	12	0	1	0	0	0	0	0	0	0	<b>16</b>
CAPD Hospital	1	2	2	1	0	0	0	2	1	0	0	<b>9</b>
CAPD Home	115	193	131	56	25	19	5	3	0	2	0	<b>549</b>
<b>Total</b>	<b>230</b>	<b>348</b>	<b>246</b>	<b>109</b>	<b>48</b>	<b>32</b>	<b>9</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1034</b>
	<b>22%</b>	<b>34%</b>	<b>24%</b>	<b>11%</b>	<b>5%</b>	<b>3%</b>	<b>1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>0%</b>	<b>100%</b>
<b>Functioning Transplants</b>	<b>560</b>	<b>246</b>	<b>41</b>	<b>18</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>877</b>
	<b>64%</b>	<b>28%</b>	<b>5%</b>	<b>2%</b>	<b>1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
<b>Total</b>	<b>790</b>	<b>594</b>	<b>287</b>	<b>127</b>	<b>54</b>	<b>34</b>	<b>11</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1911</b>
	<b>41%</b>	<b>31%</b>	<b>15%</b>	<b>7%</b>	<b>3%</b>	<b>2%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>&lt;1%</b>	<b>0%</b>	<b>100%</b>

100 Normal: no complaints, no evidence of disease.	40 Disabled; requires special medical care and assistance.
90 Able to carry on normal activity, minor signs or symptoms of disease.	30 Severely disabled; hospital care indicated, death not imminent.
80 Normal activity with effort; moderate signs or symptoms of disease.	20 Very sick, hospital care needed.
70 Care for self; unable to carry on normal activity or do active work.	10 Moribund. Fatal process progressing rapidly.
60 Requires occasional assistance but able to care for most needs.	00 Unknown or lost to follow up.
50 Requires considerable assistance and frequent medical care.	

**Figure 107**

**New Zealand**

**Quality of Life Related to Age and Method of Dialysis 31-Mar-98**

	CAPD	IPD/CCPD	Home HD	Hosp. HD	* Total
<b>25 - 44 years</b> n=	(98)	(12)	(74)	(58)	<b>(251)</b>
Normal / mild effort (Code 90-100)	77%	67%	80%	57%	<b>73%</b>
Moderate effort (Code 80-89)	11%	17%	11%	22%	<b>14%</b>
Care for self (Code 60-79)	8%	8%	8%	14%	<b>9%</b>
Disabled (Code 10-59)	4%	8%	1%	7%	<b>4%</b>
<b>45 - 64 years</b> n=	(284)	(10)	(89)	(115)	<b>(501)</b>
Normal / mild effort (Code 90-100)	54%	50%	69%	37%	<b>53%</b>
Moderate effort (Code 80-89)	27%	20%	21%	31%	<b>27%</b>
Care for self (Code 60-79)	15%	20%	9%	24%	<b>16%</b>
Disabled (Code 10-59)	4%	10%	1%	8%	<b>4%</b>
<b>65 - 84 years</b> n=	(154)	(1)	(19)	(54)	<b>(228)</b>
Normal / mild effort (Code 90-100)	42%	0%	48%	22%	<b>37%</b>
Moderate effort (Code 80-89)	28%	100%	26%	43%	<b>32%</b>
Care for self (Code 60-79)	19%	0%	21%	31%	<b>22%</b>
Disabled (Code 10-59)	11%	0%	5%	4%	<b>9%</b>

n = Number of Patients  
 \* Total includes Satellite HD

**Figure 108**

**Australia**

**Impaired Quality of Life**  
**Related to a) Diabetes, b) Race 31-Mar-98**

Age Group		Non Diabetic	Diabetic		Caucasoid	Aboriginal
<b>25 - 44 years</b>	<b>n=</b>	(925)	(153)		(780)	(164)
Care for self (Code 60-79)		7%	22%		10%	10%
Disabled (Code 10-59)		3%	11%		4%	5%
<b>45-64 years</b>	<b>n=</b>	(1592)	(412)		(1564)	(202)
Care for self (Code 60-79)		16%	32%		20%	24%
Disabled (Code 10-59)		5%	13%		6%	8%

n = Number of Patients

**Figure 109**

**New Zealand**

**Impaired Quality of Life**  
**Related to a) Diabetes, b) Race 31-Mar-98**

Age Group		Non Diabetic	Diabetic		Caucasoid	Maori	Pacific Islander
<b>25 - 44 years</b>	<b>n=</b>	(203)	(48)		(119)	(75)	(43)
Care for self (Code 60-79)		7%	19%		9%	9%	9%
Disabled (Code 10-59)		3%	6%		4%	4%	5%
<b>45-64 years</b>	<b>n=</b>	(270)	(231)		(186)	(200)	(87)
Care for self (Code 60-79)		13%	20%		12%	18%	23%
Disabled (Code 10-59)		3%	6%		5%	5%	3%

n = Number of Patients