

TABLE 3.6 Quality of Life Adjustment Factors

Duration	Health State	Adjustment
	Perfect Health	1.00
3 months	Home confinement, tuberculosis	.68
3 months	Home confinement, contagious disease	.65
3 months	Hospital dialysis	.62
3 months	Hospital confinement, tuberculosis	.60
3 months	Hospital confinement, contagious disease	.56
3 months	Depression	.44
3 months	Home dialysis	.65
8 years	Mastectomy for injury	.63
8 years	Kidney transplant	.58
8 years	Hospital dialysis	.56
8 years	Mastectomy for breast cancer	.48
8 years	Hospital confinement, contagious disease	.33
Life	Home dialysis	.40
Life	Hospital dialysis	.32
Life	Hospital confinement, contagious disease	.16
	Reference State: Dead	.00

Source: D. L. Sackett and G. W. Torrance, "The Utility of Different Health States as Perceived by the General Public," *Journal of Chronic Diseases* 31, no. 11 (1978): 697-704.

TABLE 3.7 QALY Calculation: Hypothetical Example

	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL Adjusted Life Expectancy
Time discounting factor	1.00	.952	.907	.864	.823	
Medication only (baseline)						
Quality of life	.60	.50	.40	(dead)	dead)	
Discounted value of QALY	.60	.48	.36	.00	.00	1.44 years
100% of Medication Cases have quality-adjusted life expectancy of 1.44 years.						
Surgery						
3% a) Surgical Mortality						0.00 years
57% b) Surgery not effective, but patient lives (QALYs same as baseline)						1.44 years
40% c) Surgery Successful	.90	.80	.70	.60	.50	
discounted value of QALY	.90	.76	.63	.52	.41	3.23 years
Expected value with surgery	(probability weighted sum of a, b, c) = (.03×0.00 + .57×1.44 + .40×3.23)					2.11 years
Gain in discounted QALYs with surgery	2.11 years – 1.44 years = 0.67 years					
Cost per QALY gained	\$30,000 / 0.67 = \$45,000					

Source: Health Economics and Financing.

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