

Table S2 - Utilities derived for asthma

Author, Year, Country	Study Design	Interventions	Setting	Mean (SD) Age	% Males	Utility Instrument	Baseline Utility		End of Study Utility	
							N	Mean (SD)	N	Mean (SD)
Children/Adolescents & Adults										
Willems et al. 2007 Netherlands	RCT; 12 months	nurse-led telemonitoring program vs usual outpatient care	Outpatient clinic	Adults control: 45.9 (15.9) Adults intervention: 45.7 (11.3) Children control: 10.9 (2.3) Children intervention: 10.6 (2.1)	33.3 42.3 55.6 72.4	EQ-5D index	Adults control: 27 Adults intervention: 26 Children control: 27 Children intervention: 29	0.78 (0.17) 0.89 (0.13) 0.96 (0.07) 0.92 (0.20)	Adults control: 27 Adult intervention: 26 Children control: 27 Children intervention: 29	0.79 (0.21) 0.90 (0.11) 0.97 (0.05) 0.98 (0.04)
Mittmann et al. 1999 Canada	Cross-sectional	n/a	National health survey (n=17,626)	n/a (age ≥12)	45.7	HUI 3	Overall: 1128 Age 12-19: 220 Age 20-29: 221 Age 30-39: 207 Age 40-49: 159 Age 50-59: 104 Age 60-69: 105 Age 70-79: 77 Age >80: 29 No comorbidities: 229	0.86 (0.17) 0.90 (0.12) 0.91 (0.11) 0.88 (0.15) 0.84 (0.18) 0.80 (0.19) 0.76 (0.21) 0.78 (0.19) 0.74 (0.26) 0.92 (0.097)	n/a	n/a
Mittmann et al. 2001 Canada	Cross-sectional	n/a	National health survey (n=47,534)	Age 12-19 : 12.3% Age >19: 87.7%	51.8	HUI 3	Asthma: 897	0.955 (0.066)	n/a	n/a
Schultz & Kopec 2003 Canada	Cross-sectional	n/a	National health survey (n=73,402)	n/a (age ≥12)	49.2	HUI 3	Asthma: 5467	0.87	n/a	n/a
Chiou et al. 2005 USA	Cross-sectional	n/a	Community survey of 114 adults; 72 children enrolled in RCT	Adults: 38 (15.4) Children: 9.3 (range 7-12)	42 n/a	SG	Adults: 114 moderate symptoms emotional symptoms activity limitations Children: 72 mild symptoms moderate symptoms severe symptoms	0.96 0.89 0.85 0.79 0.70 0.28	n/a	n/a
Children/Adolescents										
Juniper et al. 1997 Canada	Non-randomized, prospective cohort; 9 weeks	none	Pediatric asthma clinic	12.0 (3.1)	57.7	HUI	52	0.89 (0.09)	n/a	n/a
						SG	40	0.82 (0.15)	n/a	n/a
Adults										
Aburuz et al. 2007 UK	Cross-sectional	n/a	Asthma specialist clinic	42.3 (15.0)	38.4	EQ-5D index	86	0.47 (0.33)	n/a	n/a
Burstrom et al. 2001 Sweden	Cross-sectional	n/a	National health survey (n=3,112)	Men: 48.7; Women: 49.0	45.3	EQ-5D index	Asthma: 253	Overall: 0.79 (0.015) Male: 0.80 (0.027) Female: 0.78 (0.017)	n/a	n/a
Chen et al. 2007 USA	Cross-sectional data from prospective cohort study	none	National cohort	52.8	27	EQ-5D index	not done	not done	987	0.86 (0.16)
Ko & Coons 2006 USA	Cross-sectional	n/a	General population survey (n=4,048)	44.7 (17.4)	48	EQ-5D index	Asthma: 68	0.924 (0.0117)	n/a	n/a
Lloyd et al. 2007 UK	Non-randomized, prospective cohort; 4 weeks	none	Outpatient clinics & primary care offices	No exacerbation: 40.5 (11.6) Exacerbation: 41.4 (12.0) Exacerbation with hospitalization: 48.4 (11.0)	39.3 27.3 40	EQ-5D index	n/a	n/a	No exacerbation: 85 Exacerbation: 22 Exacerbation with hospitalization: 5	0.89 (0.15) 0.57 (0.36) 0.33 (0.39)
Lubetkin et al. 2005 USA	Cross-sectional	n/a	General population survey (n=13,646)	n/a	43	EQ-5D index	1202	0.82 (0.0069)	n/a	n/a

Oga et al. 2003 Japan	Non-randomized, prospective, patients undergoing therapeutic regimen; 6 months	n/a	Outpatient	46.8 (19.3)	41	EQ-5D index	54	0.808 (0.187)	54	0.879 (0.146)
Polley et al. 2008 Ireland	Cross-sectional	n/a	Respiratory outpatient clinic	51.6 (17.5)	65	EQ-5D index	20	0.63 (0.38)	n/a	n/a
Saarni et al. 2006 Finland	Cross-sectional	n/a	General population survey (n=6,681)	52.6	47	EQ-5D index	Asthma: 8.8% of population	0.766 (0.011)	n/a	n/a
Leidy et al. 1998 USA	Cross-sectional	n/a	Population-based survey of low- income adults with asthma	Sample: 33.4 (9.4) African American: 33.1 (8.0) Caucasian: 33.6 (10.4)	25.9 37.0 18.2	HUI	Total Sample: 112 African American: 46 Caucasian: 66	0.80 (0.16) 0.78 (0.17) 0.80 (0.16)	n/a	n/a
Revicki et al. 1998 USA	Cross-sectional	n/a	Hospital clinic patients	34.7 (10.7)	41	HUI 2	161	0.84 (0.17)	n/a	n/a
Flood et al. 2006 France, Italy, UK, USA	Cross-sectional	n/a	Community	45	44	SG	USA: 161 France: 30 Italy: 30 UK: 30	USA: 0.86 (0.14) France: 0.86 (0.17) Italy: 0.86 (0.17) UK: 0.76 (0.19)	n/a	n/a
Juniper et al. 2001 Canada	Cohort, prospective	none	Community	38 (11)	30	SG	40	0.87 (0.13)	n/a	n/a
Lloyd et al. 2008 UK	Cohort, prospective	none	Community	40.0 (12.5)	37.8	SG	Sample: 88 Complete control Marked improvement Limited improvement No change Worsening	0.784 (0.06) 0.756 (0.06) 0.748 (0.061) 0.705 (0.064) 0.711 (0.063)	n/a	n/a
Nyman et al. 2007 USA	Cross-sectional	n/a	National health survey (n=3504)	n/a (age ≥18)	n/a	TTO	Asthma: 3504	Overall: 0.820 Age 18-24: 0.895 Age 25-34: 0.879 Age 35-44: 0.832 Age 45-54: 0.794 Age 55-64: 0.768 Age 65-74: 0.756 Age 75+: 0.696	n/a	n/a
Blumenschein & Johannesson 1998 USA	Cross-sectional	n/a	Community pharmacy, hospital and outpatient clinic	40.3 (15.1)	25	SG	69	0.91 (0.018)	n/a	n/a
						TTO	69	0.89 (0.019)	n/a	n/a
McTaggart- Cowan et al. 2008 Canada	Cross-sectional	n/a	Self-reported asthma patients recruited from poster advertisement	35.0 (7.9)	30	EQ-5D index	Overall: 157 <u>Asthma severity:</u> very mild: 21 mild: 59 moderate: 51 severe: 20 <u>Asthma control:</u> very well controlled: 37 well controlled: 43 adequately controlled: 54 not well controlled: 19	0.84 (0.23) 0.84 (0.29) 0.89 (0.18) 0.81 (0.21) 0.76 (0.27) 0.90 (0.22) 0.84 (0.20) 0.81 (0.22) 0.80 (0.21)	n/a	n/a

						HUI 3	Overall: 157 <u>Asthma severity:</u> very mild: 21 mild: 59 moderate: 51 severe: 20 <u>Asthma control:</u> very well controlled: 37 well controlled: 43 adequately controlled: 54 not well controlled: 19	0.84 (0.20) 0.82 (0.22) 0.88 (0.18) 0.84 (0.15) 0.75 (0.27) 0.88 (0.18) 0.83 (0.20) 0.84 (0.15) 0.84 (0.16)	n/a	n/a
Moy et al. 2004 USA	Cross-sectional	n/a	Pharmacy database	49 (15)	24	HUI 3	Overall: 100 Mild: 41 Moderate: 33 Severe: 26	0.57 (0.34) 0.61 (0.35) 0.58 (0.35) 0.49 (0.34)	n/a	n/a
						SG	Overall: 100 Mild: 41 Moderate: 33 Severe: 26	0.91 (0.15) 0.92 (0.15) 0.93 (0.14) 0.86 (0.17)	n/a	n/a
						TTO	Overall: 100 Mild: 41 Moderate: 33 Severe: 26	0.81 (0.22) 0.90 (0.15) 0.82 (0.24) 0.66 (0.22)	n/a	n/a
Szende et al. 2004 Hungary	Cross-sectional	n/a	Outpatients & inpatients	49	34	EQ-5D index	Good control: 36 Mildly reduced control: 64 Mod. reduced control: 82 Poor control: 46	0.93 0.76 0.65 0.52	n/a	n/a
						TTO	Good control: 36 Mildly reduced control: 64 Mod. reduced control: 82 Poor control: 46	0.99 0.96 0.82 0.73	n/a	n/a

SD-standard deviation; n/a-not available; RCT-randomized controlled trial