

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Quality of Life Index (Ferrans & Powers)	Psychological state, physical/occupational function, and social interaction in heart transplant recipients.	Adult	<p>30 self-report items.</p> <p>4 subscales: health/functioning, socioeconomic, psychological, and significant others.</p> <p>Scaled scoring: 1-6 with 1 = very dissatisfied and 6 = very satisfied.</p>	<p>Established instrument</p> <p>Internal consistency reliability Cronbach's alpha for entire tool 0.92 and subscale alphas of 0.88, 0.75, 0.80, and 0.68.</p> <p>Ferrans CE, Powers MJ. (1985). Quality of Life Index: Development and psychometric properties. <i>Advances in Nursing Science</i>, 8:15-24.</p> <p>Ferrans CE, Powers MJ.(1985). Psychometric assessment of the Quality of Life Index. <i>Research in Nursing and Health</i>, 15:29-38.</p>	<p>Established instrument</p> <p>Ferrans CE, Powers MJ. (1985). Quality of Life Index: Development and psychometric properties. <i>Advances in Nursing Science</i>, 8:15-24.</p> <p>Ferrans CE, Powers MJ.(1985). Psychometric assessment of the Quality of Life Index. <i>Research in Nursing and Health</i>, 15:29-38.</p>	English	Yes	Yes	<p>Email library@ets.org or Phone 1-609-734-5689</p> <p>or</p> <p><a href="http://www.digitalriver.com">www.digitalriver.com</a></p>	<p>Grady KL, Jalowiec A, White-Williams C. Predictors of quality of life in patients at one year after heart transplantation. <i>Journal of Heart and Lung Transplantation</i>, 18(3), 202-210.</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Heart Transplant Intervention Scale	Psychological state, social interaction, physical and occupational function in post heart transplant recipients.	Adult	63-89 items (depending on time period) self-report items. Likert type scale 0-3. 0 = not helpful to 3 = very helpful.  6 subscales: information provision, self-care teaching, emotional/supportive, family related, and work/financial.	Previously reported.	Previously reported.	English	Yes	Yes	Dr Anne Jalowiec, RN, PhD Professor Emeritus, Loyola University of Chicago Email: <a href="mailto:ajalowiec@yahoo.com">ajalowiec@yahoo.com</a>  Address: 3030 Electra Drive Colorado Springs, CO 80906	Grady KL, Jalowiec A, White-Williams C. 1995. Predictors of quality of life in patients with advanced heart failure awaiting transplantation. <i>Journal of Heart and Lung Transplantation</i> , 14(1), 2-10.  Grady KL, Jalowiec A, White-Williams C. 1998. Patient compliance at one year and two years after heart transplantation. <i>Journal of Heart and Lung Transplantation</i> , 17(4), 383-394.  Grady KL, Jalowiec A, White-Williams C. 1999. Predictors of quality of life in patients at one year after heart

										<p>transplantation. <i>Journal of Heart and Lung Transplantation</i>, 18(3), 202-210.</p> <p>Grady KL, Jalowiec A, White-Williams C. 1999. Preoperative psychosocial predictors of hospital length of stay after heart transplantation. <i>Journal of Cardiovascular Nursing</i>, 14(1), 12-26.</p>
--	--	--	--	--	--	--	--	--	--	---

<b>Instrument</b>	<b>Variable Measured</b>	<b>Population</b>	<b>Description</b>	<b>Reliability</b>	<b>Validity</b>	<b>Languages</b>	<b>Copy-righted?</b>	<b>Fee?</b>	<b>Source</b>	<b>References</b>
Assessment of Compliance with Transplant Regimen	Psychological state of heart transplant recipients.	Adult	<p>13 self-report items.</p> <p>Subscales: Difficulty with compliance and actual compliance.</p> <p>Difficulty: 1 = no difficulty, 4 = a lot of difficulty.</p> <p>Compliance: 1 = all of the time, 4 = hardly ever.</p>	<p>Previously reported.</p> <p>Grady, KL, Grusk, B, Jalowiec, 1988. Unpublished citation.</p>	<p>Previously reported.</p> <p>Grady, KL, Grusk, B, Jalowiec, 1988. Unpublished citation.</p>	English	Yes	Yes	<p>Dr Anne Jalowiec, RN, PhD Professor Emeritus, Loyola University of Chicago Email: ajalowiec@yahoo.com</p> <p>Address: 3030 Electra Drive Colorado Springs, CO 80906</p>	<p>Grady KL, Jalowiec A, White-Williams C. 1999. Predictors of quality of life in patients at one year after heart transplantation. <i>Journal of Heart and Lung Transplantation</i>, 18(3), 202-210.</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Quality of Well-Being Scale (QWB)	Baseline measurement of health-related quality of life in pre-lung transplant candidates after UNOS listing.	Adult	<p>50 items administered by a trained interviewer</p> <p>Structured interview incorporating preference-weighted symptom-problem complexes and similarly preference-weighted components of functioning including social activity, physical activity, and mobility.</p> <p>Scoring range from 0.0 (dead) to 1.0 (optimum functioning). Believed to provide a “numerical point-in-time expression of well-being”.</p>	Not available	Not available	English Chinese, French, German (modified version), Hmong, Japanese, Khmer (Cambodian), Laotian, Navaho, Spanish, Vietnamese	Yes	No information available	McDowell, Ian and Claire Newell. <i>Measuring Health: A Guide to Rating Scales and Questionnaires</i> . New York: Oxford University Press, 1987	Squier et al, 1995. Quality of well-being predicts survival in lung transplantation candidates. <i>American Journal of Respiratory and Critical Care Medicine</i> , 152, 2032-2036.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Medical Outcomes Study-Short Form Health Profile (MOS-20)	Measurement of health related quality of life in lung transplant recipients.	Adult	<p>MOS-20 evaluates 6 dimensions or "core health concepts": limitations in physical activities because of health problems; limitation in social activities because of physical or emotional problems; limitations in usual role activities because of health; bodily pain; general mental health; and general health perceptions.</p> <p>Each dimension scored on summated rating scale and adjusted from 0 (worst) to 100 (best).</p>	<p>Cronbach's alpha range from 0.81-0.91.</p> <p>Developers reported 0.81-0.88 with test-retest correlations of 0.67-0.76 for single-item indicators of pain and social functioning.</p>	Construct validity established	English	No	No	<p>RAND Health Communications 1700 Main Street P.O. Box 2138 Santa Monica, CA 90407-2138 Tel: (310) 393-0411, ext. 7775 Web: <a href="http://www.rand.org/health/surveys.html">http://www.rand.org/health/surveys.html</a> E-mail: RAND_Health@rand.org</p>	Gross et al, 1995. Long-term health status and quality of life outcomes of lung transplant recipients. <i>Chest</i> , 108(6), 1587-1593.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Karnofsky Performance Status (KPS)	Measures patient functioning in day-to-day activities.	Adult	<p>Worded in first person. Eight levels from 1 = normal, no symptoms or signs of disease, to 8 = worse than disabled.</p> <p>11 States of health are measured. Each state of health assigned an index ranging from 0 for death to 100 for the health state without problems.</p>	<p>Widely used.</p> <p>Demonstrated reliability.</p>	Validated in several patient populations.	English	No	No	<p>Columbia University Press holds the copyright.</p> <p>Reprinted in Mor, V. et al. (1984). The Karnofsky Performance Status Scale: An examination of its reliability and validity in a research setting. <i>Cancer</i>, 53, 2002-2007.</p>	<p>Busschbach et al, 1994. Measuring the quality of life before and after bilateral lung transplantation in patients with cystic fibrosis. <i>Chest</i>, 105(3), 911-917.</p> <p>Gross et al, 1995. Long-term health status and quality of life outcomes of lung transplant recipients. <i>Chest</i>, 108(6), 1587-1593.</p> <p>TenVergert EM, Essink-Bot ML, Geertsma A, et al, 1998. The effect of lung transplantation on health-related quality of life. <i>Chest</i>, 113(2), 358-364.</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
<p>QOL: Visual Analog Scale</p> <p>Note: A similar scale is the Visual Analog Mood Scales (VAMS)</p>	<p>Measures present state of health in lung transplant recipients.</p> <p>Overall quality of life in lung transplant candidates and recipients.</p>	Adult	<p>Calibrated line (thermometer) numbered from 0-100. Bottom of line is considered the worse imaginable health state, and the top of the line as the best imaginable health state.</p> <p>Self-report. Patients to mark the point on line that best represents present state of health.</p>	<p>Well established.</p> <p>Find more information at <a href="http://www.parinc.com/product.cfm?ProductID-251">http://www.parinc.com/product.cfm?ProductID-251</a>.</p>	<p>Well established.</p> <p>Find more information at <a href="http://www.parinc.com/product.cfm?ProductID-251">http://www.parinc.com/product.cfm?ProductID-251</a>.</p>	English	Yes	Yes	<p>Psychological Assessment Resources, Inc., 16204 N. Florida Avenue, Lutz, FL 33549-8119; Telephone: 800-331-8378  FAX: 800-727-9329;  E-mail: <a href="mailto:custserv@parinc.com">custserv@parinc.com</a>;  Web: <a href="http://www.parinc.com">www.parinc.com</a></p>	<p>Busschbach JJV, Horikx PE, van den Bosch, JMM, et al, 1994. Measuring the quality of life before and after bilateral lung transplantation in patients with cystic fibrosis. <i>Chest</i>, 105(3), 911-917.</p> <p>Limbos MM, Joyce DP, Chan CKN et al. 2000. Psychological functioning and quality of life in lung transplant candidates and recipients. <i>Chest</i>, 118(2):408-416.</p>



Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Nottingham Health Profile (NHP)	Measures health state of heart-lung transplant recipients.	Adult Pediatric	<p>Part I: 38 statements relating to dysfunction and distress in six dimensions: physical mobility; pain; energy; sleep; social isolation; and emotional reactions.</p> <p>Scored 0-100 with higher scores indicating higher level of dysfunction or distress.</p> <p>Part II: Patients asked whether present state of health is causing problems in any of seven areas of daily living: job or work; looking after the home; sex life; family relationships; social life; hobbies; and holidays.</p>	Widely used.  Demonstrated reliability.	<p>Construct validity established with contrasted groups and verified in over 2000 research studies.</p> <p>Validated in several patient populations.</p>	Arabic, Danish, Dutch, English US, Finnish, French, German, Hungarian*, Italian, Japanese, Norwegian, Spanish and Swedish	Yes	Yes	<p>Dr. Stephen McKenna Galen Research Enterprise House Manchester Science Park Lloyd Street North Manchester M15 6SE, UK Tel: +44 (0) 161 226 4446 Fax: +44 (0) 161 226 4478 Email: gr@galen-research.com Web: www.galen- research.com</p>	<p>Jones BM, Taylor F, Downs K, et al.. 1992. Longitudinal study of quality of life and psychological adjustment after cardiac transplantation. <i>Medical Journal of Australia</i>, 157: 24-26.</p> <p>Busschbach et al, 1994. Measuring the quality of life before and after bilateral lung transplantation in patients with cystic fibrosis. <i>Chest</i>, 105(3), 911-917.</p> <p>Caine N, Sharples LD, Dennis C, et al. 1996. Measurement of health-related quality of life before and after heart-lung transplantation. <i>Journal of Heart and Lung Transplantation</i>, 15(10): 1047-1058.</p> <p>TenVergert EM, Essink-Bot ML, Geertsma A, et al, 1998. The effect of lung transplantation on health-related quality of life <i>Chest</i>, 113(2), 358-364.</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Hospital Anxiety and Depression Scale (HAD)	Anxiety and depression in heart-lung transplant recipients.	Adult Pediatric	<p>14 questions scored on scale from 0-3, with possible score of 21 for anxiety and 21 for depression.</p> <p>Scores of 10 or greater are considered to be clinically significant.</p> <p>Focuses on psychological symptoms rather than somatic symptoms of depression, therefore it is thought to be more appropriate for use with individuals who have concurrent general medical illnesses.</p> <p>Completion time: 2 to 5 minutes</p>	Found to be reliable in detecting states of depression and anxiety in a hospital medical outpatient clinic setting.	Documented.	English	Yes	Yes	<p>Milne, Derek, ed. Assessment: A Mental Health Portfolio, Depression. Windsor, England: The NFER-NELSON Publishing Company Ltd., 1992</p>	<p>Caine N, Sharples LD, Dennis C, et al. 1996. Measurement of health-related quality of life before and after heart-lung transplantation. <i>Journal of Heart and Lung Transplantation</i>, 15(10):1047-1058.</p> <p>Limbos MM, Chan CK, Kesten S. 1997. Quality of life in female lung transplant candidates and recipients. <i>Chest</i>, 112(5):1165-1174.</p> <p>Hetzer et al, 1997. Status of patients presently living 9-13 years after orthotopic heart transplantation. <i>Annals of Thoracic Surgery</i>, 64, 1161-1168.</p> <p>Salmon P, Mikhail G, Stanford C, et al. 1998. Psychological adjustment after cardiac transplantation. <i>Journal of Psychosomatic Research</i>, 45(5):449-458.</p> <p>Limbos MM, Joyce DP, Chan CKN et al. 2000. Psychological functioning and quality of life in lung transplant candidates and recipients. <i>Chest</i>, 118(2):408-416.</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Short Form-36 Health Survey (SF-36) (also called Medical Outcomes Study Short Form-36 (MOS SF-36))	Assess lung transplant recipients' quality of life in 8 domains.  Health related quality of life in patients with heart failure.	Adult	36 items related to 8 scales. Responses are summed and converted to scale ranging from 0-100, with 100 indicating best function.  Self-administered and completion within 10 minutes.  Concepts reduced to 3 general health attributes: functional status, well-being and overall health.  Functional status: 4 scales. Limitations in physical functioning; limitations in role functioning; limitations in role functioning due to emotional limitations; and degree to which health interfered with social functioning and interactions with others.  Well-being: 3 scales. Depression and mood state; energy/fatigue; and pain.  Overall health: 5 items. Perception of general health over past year.	Well-standardized instrument. Widely used with healthy and medical populations.  Adequate test-retest reliability and internal consistency have been demonstrated.  Test-retest reliability (0.60 to 0.81) and good internal consistency (0.78 to 0.93).	Well-standardized instrument. Widely used with healthy and medical populations.  .	Afrikaans, Armenia, Bulgarian, Chinese, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Latvian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Turkish.	Yes	Yes	<a href="http://www.qualitymetric.com/products/descriptions/sflices.html">http://www.qualitymetric.com/products/descriptions/sflices.html</a>	Littlefield C, Abbey S, Fiducia D, et al. 1996. Quality of life following transplantation of the heart, liver, and lungs. <i>General Hospital Psychiatry</i> , 18: 38S-47S.  Kaba, E. & Shanley, E., 1997. Identification of coping strategies used by heart transplant recipients. <i>British Journal of Nursing</i> , 6(15), 858-862.  Cohen L, Littlefield C, Kelly P, et al. 1998. Predictors of quality of life and adjustment after lung transplantation. <i>Chest</i> , 113(3): 633-644.  MacNaughton et al, 1998. Health-related quality of life and symptom frequency before and after lung transplantation.  Westlake et al, 2002. Correlates of health-related quality of life in patients with heart failure. <i>Heart &amp; Lung</i> , 31(2), 85-93.

<b>Instrument</b>	<b>Variable Measured</b>	<b>Population</b>	<b>Description</b>	<b>Reliability</b>	<b>Validity</b>	<b>Languages</b>	<b>Copy-righted?</b>	<b>Fee?</b>	<b>Source</b>	<b>References</b>
Transplant Symptom Frequency & Distress Scale	Assess lung transplant recipients' health-related symptoms.	Adult	<p>29 commonly experienced symptoms secondary to chronic illness and immunosuppression evaluated.</p> <p>5 point Likert Scale (0 = never have symptom and 4 = always have symptom). Patient also asked to answer whether the symptom is a problem for them (yes or no).</p> <p>Yields total symptom frequency score.</p> <p>A total problem score is derived by computing the number of symptoms affirmed as a problem.</p>	Newly developed tool.	Newly developed tool.	English	Information Not Available	Information Not Available	Information Not Available	MacNaughton et al, 1998. Health-related quality of life and symptom frequency before and after lung transplantation. <i>Clinical Transplantation</i> , 12(4), 320-323.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
UCLA Loneliness Scale-Revised  Note: version 3 is the most recent one	Quality of relationships with others in heart, liver, and lung transplant recipients.	Adult	Measures degree of connectedness with other individuals.  Two subscales: loneliness and companionship, and a total loneliness score.	Demonstrated reliability.  Russell, D., Peplau, L. A., & Ferguson, M. 1978. Developing a measure of loneliness. <i>Journal of Personality Assessment</i> , 42, 290-294.	Demonstrated validity.  Russell, D., Peplau, L. A., & Ferguson, M. 1978. Developing a measure of loneliness. <i>Journal of Personality Assessment</i> , 42, 290-294.	English	Yes	No	Russell, D. (1996). The UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. <i>Journal of Personality Assessment</i> , 66, 20-40.  Email: drussell@iastate.edu	Littlefield C, Abbey S, Fiducia D, et al. 1996. Quality of life following transplantation of the heart, liver, and lungs. <i>General Hospital Psychiatry</i> , 18:38S-47S.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Illness Intrusiveness Ratings Scale (IIRS)	Patients' perceptions regarding the degree to which their transplant and the associated post transplant medical regimen interferes with 13 life domains.	Adult	13 item scale covering 13 domains: Work; active recreation; passive recreation; financial situation; relationship with spouse; sex life; family relations; other social relations; self-expression and self-improvement; religious expression, and community and civic involvement.	Internal consistency .80  Devins, G.M., Binik, Y. M., Hutchinson, T.A. et al. 1984. The emotional impact of end-stage renal disease: importance of patients' perceptions of intrusiveness and control. <i>International Journal of Psychiatry in Medicine</i> , 13(4), 1083-84.	Supported by comparison of mode of treatment intrusiveness between transplant and dialysis. Transplant was significantly less intrusive than dialysis with all $p < .05$ (divergent validity). Also, supported by correlations with related measures (convergent validity).  Devins, G.M., Binik, Y. M., Hutchinson, T.A. et al. 1984. The emotional impact of end-stage renal disease: importance of patients' perceptions of intrusiveness and control. <i>International Journal of Psychiatry in Medicine</i> , 13(4), 1083-84.	English French, Spanish, Chinese, Korean, and German	No	No	Devins, G., Dion, R., Pelletier, L., Shapiro, C., Abbey, S., Raiz, L. et al. (2001). The structure of lifestyle disruptions in chronic disease: A confirmatory factor analysis of the Illness Intrusiveness Ratings Scale. <i>Medical Care</i> , 39, 1097-1104. (the appendix includes the instrument)  Gerald M. Devins Toronto General Hospital, CW2-300, 200 Elizabeth Street, Toronto, Ontario M5G 2C4, Canada. Tel.: 416-340-3113 Fax: 416-340-3099 Email: gdevins@uhnres.utoronto.ca	Littlefield C, Abbey S, Fiducia D, et al. 1996. Quality of life following transplantation of the heart, liver, and lungs. <i>General Hospital Psychiatry</i> , 18:38S-47S.

<b>Instrument</b>	<b>Variable Measured</b>	<b>Population</b>	<b>Description</b>	<b>Reliability</b>	<b>Validity</b>	<b>Languages</b>	<b>Copy-righted?</b>	<b>Fee?</b>	<b>Source</b>	<b>References</b>
Index of Well-being (IWB)	Assesses overall well-being in lung transplant recipients.	Adult	Self-report.	Widely used.  Demonstrated reliability.	Validated in several patient populations.	English	Yes	Yes	McDowell, Ian and Claire Newell. <i>Measuring Health: A Guide to Rating Scales and Questionnaires</i> . New York: Oxford University Press, 1987	TenVergert EM, Essink-Bot ML, Geertsma A, et al 1998. The effect of lung transplantation on health-related quality of life. <i>Chest</i> , 113(2), 358-364.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Basic Personality Inventory (BPI)	Psychopathology in lung transplant recipients.	Adult	<p>12 scale, 240 items, true/false self-report inventory.</p> <p>Designed to tap dimensions underlying the Minnesota Multiphasic Personality Inventory clinical scales and improve their measurement properties.</p>	<p>Internal consistency for the 12 scales range from 0.69 to 0.86.</p> <p>Test-retest reliabilities average 0.56</p> <p>Kroner DG, Reddon JR, Beckett N. 1991. Basic personality inventory clinical and validity scales: stability and internal consistency. <i>Journal of Psychopathology and Behavioral Assessment</i>, 13, 147-54.</p> <p>Internal consistency for the higher order factor scales of psychiatric symptomatology range from 0.89 to 0.92.</p> <p>Holden RR, Helmes, E, Fekken GC et</p>	<p>Convergent and discriminant validity established.</p> <p>Validity information obtained from <a href="http://www.sigmaassessmentsystem.com/bpi.htm">http://www.sigmaassessmentsystem.com/bpi.htm</a></p>	English, French, and Spanish	Yes	Yes	<p>Sigma Assessment Systems, Inc., 511 Fort Street, Suite 435, P.O. Box 610984, Port Huron, MI 48061-0984  Tel: 800-265-1285  FAX: 800-361-9411  E-mail: SIGMA@sigmaassessmentsystems.com;  Web: <a href="http://www.sigmaassessmentsystems.com">www.sigmaassessmentsystems.com</a></p>	<p>Cohen L, Littlefield C, Kelly P, et al.. 1998. Predictors of quality of life and adjustment after lung transplantation. <i>Chest</i>, 113(3): 633-644.</p>



				<p>al. 11988. Clinical reliabilities and validities of the Basic Personality Inventory. <i>Journal of Consulting Clinical Psychology</i>, 56, 766-68.</p> <p>Additional reliability information available at <a href="http://www.sigmaassessmentsystems.com/bpi.htm">http://www.sigmaassessmentsystems.com/bpi.htm</a></p>						
--	--	--	--	--	--	--	--	--	--	--

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Mental Health Inventory (MHI)	Psychological adjustment and well-being in post lung transplant recipients.	Adult	<p>18 item version and 37 item version.</p> <p>5 subscales: anxiety, depression, loss of behavioral/emotional control, positive affect, and interpersonal ties.</p> <p>Patients respond on basis of how often "in the past month" they have experienced each symptom. Accompanied by 6 choice response set ranging from 1 (all of the time) to 6 (none of the time).</p>	<p>Reliability 0.96</p> <p>Test-retest stability coefficients over a one year period range from 0.60-0.76.</p>	Correlates highly with other instruments that measure general and specific mental health.	English	No	No	<p><i>Journal of Consulting and Clinical Psychology (1983), 51(5), 73-42.</i></p> <p>RAND Health Communications 1700 Main Street P.O. Box 2138 Santa Monica, CA 90407-2138 Tel: (310) 393-0411, ext. 7775 Web: <a href="http://www.rand.org/health/surveys.html">http://www.rand.org/health/surveys.html</a> E-mail: RAND_Health@rand.org</p>	<p>Littlefield C, Abbey S, Fiducia D, et al. 1996. Quality of life following transplantation of the heart, liver, and lungs. <i>General Hospital Psychiatry, 18:38S-47S.</i></p> <p>Cohen L, Littlefield C, Kelly P, et al. 1998. Predictors of quality of life and adjustment after lung transplantation. <i>Chest, 113(3): 633-644.</i></p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Sleep Disturbance Questionnaire (SDQ)	Sleep quality in lung transplant recipients.	Adult	<p>7 item survey developed at The Toronto Hospital (TTH).</p> <p>Patients asked to think about sleep quality over past two weeks and indicate from 1 (not at all) to 5 (a great deal) whether they have had the following: trouble falling asleep, trouble sleeping soundly; episodes of awakening during the night, troublesome dreams, difficulty awakening, symptoms of being tired upon awakening, and episodes of awakening early and being unable to get back to sleep.</p>	<p>Alpha coefficient in group of hypertensive patients 0.72.</p> <p>Test-retest reliability over 1 month period 0.74.</p>	Not reported	English	Information Not Available	Information Not Available	Information Not Available	Cohen L, Littlefield C, Kelly P, et al. 1998. Predictors of quality of life and adjustment after lung transplantation. <i>Chest</i> , 113(3): 633-644.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Cardiac Symptom Inventory	Cardiac and pulmonary symptoms in lung transplant recipients.	Adult	<p>Developed at the Toronto Hospital.</p> <p>Self-reported symptoms.</p> <p>Patients are asked to rate how bothersome the following symptoms are on a five-point scale from 1 (no bother) to 5 (extremely bothersome): dizziness, trouble with balance, shortness of breath or trouble getting your breath, shortness of breath when active, light-headedness in the morning, light-headedness upon standing, pain in chest or heart, heavy heart beat, irregular heart beat (palpitations), racing heartbeat, and fainting spells.</p>	<p>Alpha coefficient in a group of hypertensive patients was 0.90.</p> <p>Test-retest reliability over 1 month period was 0.79.</p>	Documented	English	Information Not Available	Information Not Available	Information Not Available	<p>Cohen L, Littlefield C, Kelly P, et al. 1998. Predictors of quality of life and adjustment after lung transplantation. <i>Chest</i>, 113(3): 633-644</p> <p>Note: This tool was used in place of the Chronic Respiratory Disease Questionnaire because the latter is administered in an interview format..</p>

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Multidimensional Health Locus of Control (MHLC) Scales  Note: contains Internal Control and Chance Control subscales	Perceptions of control over health-relevant factors in lung transplant recipients.  Kidney transplant recipients' perceptions of control concerning health following transplantation.	Adult	18 item self-report.  Assesses internal, powerful others, and chance health locus of control in reference to health-relevant situations.  Internal Control Scale: 6 items  Chance Control Scale: 6 items  1 = disagree strongly to 6 = agree strongly.	Internal consistency reliability established with alpha coefficients from .691 to .849.  Wallston, K. A. Wallston, B. S. 1978. Development of the multidimensional health locus of control (MHLC) Scales. <i>Health Education Monographs</i> , 6(2), 160-171.	Predictive validity established.  Wallston, K. A. Wallston, B. S. 1978. Development of the multidimensional health locus of control (MHLC) Scales. <i>Health Education Monographs</i> , 6(2), 160-171.	English	No	No	Richard R. Lau; Institute of Health Policy and Aging, Rutgers University, 30 College Avenue, New Brunswick, NJ 08903 Website: <a href="http://www.vanderbilt.edu/nursing/kwallston/mhlc scales.htm">http://www.vanderbilt.edu/nursing/kwallston/mhlc scales.htm</a>	Cohen L, Littlefield C, Kelly P, et al. 1998. Predictors of quality life and adjustment after lung transplantation. <i>Chest</i> , 113(3), 633-644.  Tix AP, Frazier PA. 1998. The use of religious coping during stressful life events: Main effects, moderation, and mediation. <i>Journal of Consulting and Clinical Psychology</i> , 66(2): 411-422.

Instrument	Variable Measured	Population	Description	Reliability	Validity	Languages	Copy-righted?	Fee?	Source	References
Rand-36 Item Health Survey (RAND-36)	Comprehensive measure of health related quality of life in lung transplant candidates and recipients.	Adult	36 items; Assesses eight health concepts: Limitations in physical activities because of health problems (physical); limitations in social activities because of physical or emotional problems (social); limitations in usual role activities because of physical health problems (role physical); bodily pain (pain); general mental health (emotional); limitations in usual role activities because of emotional problems (role emotional); energy and fatigue (vitality); and general health perceptions (general health).	Standardized on 2,546 patients with chronic medical conditions.  Published norms available.	Improved validity over earlier version (Medical Outcome Study Health Survey-20)	English	No	No	RAND Health Communications 1700 Main Street P.O. Box 2138 Santa Monica, CA 90407-2138 Tel: (310) 393-0411, ext. 7775 Web: <a href="http://www.rand.org/health/surveys.html">http://www.rand.org/health/surveys.html</a> E-mail: RAND_Health@rand.org	Limbos MM, Chan CK, Kesten S. 1997. Quality of life in female lung transplant candidates and recipients. <i>Chest</i> , 112(5):1165-1174.  Limbos MM, Joyce DP, Chan CKN et al. 2000. Psychological functioning and quality of life in lung transplant candidates and recipients. <i>Chest</i> , 118(2):408-416.