



## 7. References related to specific instruments to measure outcome

### Baseline Dyspnea Index and Transition Dyspnea Index

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Mahler, D.A., & Wells, C.K. (1988). Evaluation of clinical methods for rating dyspnea. *Chest*, 93, 580-586.

### British Medical Research Council (BMRC) Dyspnea Scale and Modified MRC Scale

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## **Cancer Dyspnoea Scale**

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Tanaka, K., Akechi, T., Okuyama, T., Nishiwaki, Y., & Uchitomi, Y. (2002). Prevalence and screening of dyspnea interfering with daily life activities in ambulatory patients with advanced lung cancer. *Journal of Pain Symptom Management*, *23*, 484-489.

## **Chronic Respiratory Disease Questionnaire**

Goldstein, R.S., Gort, E.H., Stubbing, D., Avendano, M.A., & Guyatt, G.H. (1994). Randomised controlled trial of respiratory rehabilitation. *Lancet*, *344*, 1394–1397.

Guyatt, G.H., Berman, L.B., Townsend, M., Pugsley, S.O., & Chambers, L.W. (1987). A measure of quality of life for clinical trials in chronic lung disease. *Thorax*, *42*, 773–778.

Wijkstra, P.J., TenVergert, E.M., Van Altena, R., Otten, V., Postma, D.S., Kraan, J., et al. (1994). Reliability and validity of the chronic respiratory questionnaire (CRQ). *Thorax*, *49*, 465–467.

## **Modified Borg Scale**

Bernstein, M.L., Despars, J.A., Singh, N.P., Avalos, K., Stansbury, D.W., & Light, R.W. (1994). Reanalysis of the 12-minute walk in patients with chronic obstructive pulmonary disease. *Chest*, *105*, 163–167.

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Lush, M.T., Janson-Bjerklie, S., Carrieri, V.K., & Lovejoy, N. (1988). Dyspnea in the ventilator-assisted patient. *Heart and Lung*, *17*, 528–535.

Mador, M.J., & Kufel, T.J. (1992). Reproducibility of visual analog scale measurements of dyspnea in patients with chronic obstructive pulmonary disease. *American Review of Respiratory Disease*, *146*, 82–87.



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Wolkove, N., Dajczman, E., Colacone, A., & Kreisman, H. (1989). The relationship between pulmonary function and dyspnea in obstructive lung disease. *Chest*, 96, 1247 - 1251.

### **Oxygen-Cost Diagram**

McGavin, C. R., Artvinli, M., Naoe, H., & McHardy, G. J. (1978). Dyspnoea, disability, and distance walked: comparison of estimates of exercise performance in respiratory disease. *BMJ*, 2, 241 - 243.

### **Pulmonary Functional Status and Dyspnea Questionnaire**

Lareau, S. C., Carrieri-Kohlman, V., Janson-Bjerklie, S., & Roos, P. J. (1994). Development and testing of the Pulmonary Functional Status and Dyspnea Questionnaire (PFSDQ). *Heart and Lung*, 23, 242 - 250.

### **University of California, San Diego, Shortness of Breath Questionnaire**

Eakin, E.G., Resnikoff, P.M., Prewitt, L.M., Ries, A.L., & Kaplan, R.M. (1998). Validation of a new dyspnea measure: The UCSD Shortness of Breath Questionnaire. University of California, San Diego. *Chest*, 113, 619–624.

### **Visual Analogue Scale**

\*\*Brown, M.L., Carrieri, V., Janson, B., & Dodd, M.J. (1986). Lung cancer and dyspnea: the patient's perception. *Oncology Nursing Forum*, 13, 19–24.

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Gift, A. (1986). Dyspnea: Measurement and management. *American Review of Respiratory Disease*, 133, A163.

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\*\*This tool has evidence of either reliability or validity in patients with cancer. Most of the included tools report measurement of dyspnea in various respiratory diagnoses. When possible, the tables indicate if the tools measure dyspnea or exertional dyspnea.

*One additional instrument (ATS-DLD) 78 was identified in the literature as a respiratory epidemiological questionnaire. This tool is not included in the reference table because full information was not available, but it is listed here. Imbedded in this tool is a question that grades the degree to which a person's breathlessness interferes with mobility and function. The "Grade of Breathlessness Scale" is based on revisions of the British Medical Research Council questionnaire and is described in the tables under that instrument.*

### **American Thoracic Society-Division Lung Diseases (ATS-DLD) 78 Questionnaire**

Comstock, G.W., Tockman, M.S., Helsing, K.J., & Hennesy, K.M. (1979). Standardized respiratory questionnaires: Comparison of the old with the new. *American Review of Respiratory Disease*, 119, 45–53.

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### **Reviews of Dyspnea Measurement Instruments**

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McCord, M., & Cronin-Stubbs, D. (1992). Operationalizing dyspnea: Focus on measurement. *Heart and Lung*, 21, 167–179.

Sidani, S. (2003). Symptom management. In D.M. Doran (Ed.), *Nursing-sensitive outcomes* (pp. 115–175). Sudbury, MA: Jones and Bartlett.

Scott, M.L. (2004). Measuring dyspnea. In M. Frank-Stromborg & S.J. Olsen (Eds.), *Instruments for clinical health-care research* (3rd ed., pp. 523–534). Sudbury, MA: Jones and Bartlett.

van der Molen, B. (1995). Dyspnoea: A study of measurement instruments for the assessment of dyspnoea and their application for patients with advanced cancer. *Journal of Advanced Nursing*, 22, 948-956.