

SF-6D

The [SF-36](#) has become the most widely used measure of general health in clinical studies throughout the world. It currently generates eight dimension scores and two summary scores for physical and mental health. Whilst such scores provide an excellent means for judging the effectiveness of health care interventions, they have only a limited application in economic evaluation because they are not based on preferences.

The SF-6D provides a means for using the SF-36 and SF-12 in economic evaluation by estimating a preference-based single index measure for health from these data using general population values. The SF-6D allows the analyst to obtain quality-adjusted life years ([QALYs](#)) from the SF-36 for use in cost utility analysis.

What is the SF-6D?

The SF-6D is a classification for describing health derived from a selection of SF-36 items. It is composed of six multi-level dimensions. Any patient who completes the SF-36 or the SF-12 can be uniquely classified according to the SF-6D. The SF-6D describes 18,000 health states in all.

1: Van Bogaert W, Putman K, Coppieters I, Goudman L, Nijs J, Moens M, Buyl R, Ickmans K, Huysmans E. [Health-related quality of life](#) deviations from population norms in patients with [lumbar radiculopathy](#): associations with pain, pain cognitions, and endogenous nociceptive modulation. *Qual Life Res.* 2021 Aug 3. doi: 10.1007/s11136-021-02964-5. Epub ahead of print. PMID: 34342846.

2: Brown AE, Lebovic J, Alas H, Pierce KE, Bortz CA, Ahmad W, Naessig S, Hassanzadeh H, Labaran LA, Puvanesarajah V, Vasquez-Montes D, Wang E, Raman T, Diebo BG, Vira S, Protopsaltis TS, Lafage V, Lafage R, Buckland AJ, Gerling MC, Passias PG. A cost utility analysis of treating different adult spinal deformity frailty states. *J Clin Neurosci.* 2020 Oct;80:223-228. doi: 10.1016/j.jocn.2020.07.047. Epub 2020 Aug 27. PMID: 33099349.

3: Jain A, Yeramaneni S, Kebaish KM, Raad M, Gum JL, Klineberg EO, Hassanzadeh H, Kelly MP, Passias PG, Ames CP, Smith JS, Shaffrey CI, Bess S, Lafage V, Glassman S, Carreon LY, Hostin RA; International Spine Study Group. Cost-Utility Analysis of rhBMP-2 Use in Adult Spinal Deformity Surgery. *Spine (Phila Pa 1976).* 2020 Jul 15;45(14):1009-1015. doi: 10.1097/BRS.0000000000003442. PMID: 32097274.

4: Selva-Sevilla C, Ferrara P, Gerónimo-Pardo M. Interchangeability of the EQ-5D and the SF-6D, and comparison of their psychometric properties in a spinal postoperative Spanish population. *Eur J Health Econ.* 2020 Jun;21(4):649-662. doi: 10.1007/s10198-020-01161-4. Epub 2020 Feb 17. PMID: 32065301.

5: Merali ZG, Witiw CD, Badhiwala JH, Wilson JR, Fehlings MG. Using a machine learning approach to predict outcome after surgery for degenerative cervical myelopathy. *PLoS One.* 2019 Apr 4;14(4):e0215133. doi: 10.1371/journal.pone.0215133. PMID: 30947300; PMCID: PMC6448910.

6: Horn SR, Passias PG, Hockley A, Lafage R, Lafage V, Hassanzadeh H, Horowitz JA, Bortz CA, Segreto FA, Brown AE, Smith JS, Sciubba DM, Mundis GM, Kelley MP, Daniels AH, Burton DC, Hart RA, Schwab

- FJ, Bess S, Shaffrey CI, Hostin RA, Ames CP; International Spine Study Group. Cost-utility of revisions for cervical deformity correction warrants minimization of reoperations. *J Spine Surg.* 2018 Dec;4(4):702-711. doi: 10.21037/jss.2018.10.02. PMID: 30714001; PMCID: PMC6330577.
- 7: Kuspinar A, Mate K, Lafontaine AL, Mayo N. Evaluating the content validity of generic preference-based measures for use in Parkinson's disease. *Parkinsonism Relat Disord.* 2019 May;62:112-116. doi: 10.1016/j.parkreldis.2019.01.014. Epub 2019 Jan 14. PMID: 30685325.
- 8: Yeramaneeni S, Ames CP, Bess S, Burton D, Smith JS, Glassman S, Gum JL, Carreon L, Jain A, Zygorakis C, Avramis I, Hostin R; International Spine Study Group. Center variation in episode-of-care costs for adult spinal deformity surgery: results from a prospective, multicenter database. *Spine J.* 2018 Oct;18(10):1829-1836. doi: 10.1016/j.spinee.2018.03.012. Epub 2018 Mar 22. PMID: 29578109.
- 9: Witiw CD, Tetreault LA, Smieliauskas F, Kopjar B, Massicotte EM, Fehlings MG. Surgery for degenerative cervical myelopathy: a patient-centered quality of life and health economic evaluation. *Spine J.* 2017 Jan;17(1):15-25. doi: 10.1016/j.spinee.2016.10.015. Epub 2016 Oct 25. PMID: 27793760.
- 10: Gum JL, Hostin R, Robinson C, Kelly MP, Carreon LY, Polly DW, Bess RS, Burton DC, Shaffrey CI, Smith JS, LaFage V, Schwab FJ, Ames CP, Glassman SD; International Spine Study Group. Impact of cost valuation on cost-effectiveness in adult spine deformity surgery. *Spine J.* 2017 Jan;17(1):96-101. doi: 10.1016/j.spinee.2016.08.020. Epub 2016 Aug 11. PMID: 27523283.
- 11: Carreon LY, Glassman SD, Ghogawala Z, Mummaneni PV, McGirt MJ, Asher AL. Modeled cost-effectiveness of transforaminal lumbar interbody fusion compared with posterolateral fusion for spondylolisthesis using N(2)QOD data. *J Neurosurg Spine.* 2016 Jun;24(6):916-21. doi: 10.3171/2015.10.SPINE15917. Epub 2016 Feb 19. PMID: 26895529.
- 12: Ament JD, Yang Z, Nunley P, Stone MB, Lee D, Kim KD. Cost Utility Analysis of the Cervical Artificial Disc vs Fusion for the Treatment of 2-Level Symptomatic Degenerative Disc Disease: 5-Year Follow-up. *Neurosurgery.* 2016 Jul;79(1):135-45. doi: 10.1227/NEU.0000000000001208. PMID: 26855020; PMCID: PMC4900425.
- 13: Falavigna A, Scheverin N, Righesso O, Teles AR, Gullo MC, Cheng JS, Riew KD. Economic value of treating lumbar disc herniation in Brazil. *J Neurosurg Spine.* 2016 Apr;24(4):608-14. doi: 10.3171/2015.7.SPINE15441. Epub 2015 Dec 11. PMID: 26654336.
- 14: Chotai S, Parker SL, Sivaganesan A, Godil SS, McGirt MJ, Devin CJ. Quality of Life and General Health After Elective Surgery for Cervical Spine Pathologies: Determining a Valid and Responsive Metric of Health State Utility. *Neurosurgery.* 2015 Oct;77(4):553-60; discussion 560. doi: 10.1227/NEU.0000000000000886. PMID: 26191977.
- 15: Whitmore RG, Curran JN, Ali ZS, Mummaneni PV, Shaffrey CI, Heary RF, Kaiser MG, Asher AL, Malhotra NR, Cheng JS, Hurlbert J, Smith JS, Magge SN, Steinmetz MP, Resnick DK, Ghogawala Z. Predictive value of 3-month lumbar discectomy outcomes in the NeuroPoint-SD Registry. *J Neurosurg Spine.* 2015 Oct;23(4):459-66. doi: 10.3171/2015.1.SPINE14890. Epub 2015 Jul 3. PMID: 26140406.
- 16: Fehlings MG, Jha NK, Hewson SM, Massicotte EM, Kopjar B, Kalsi-Ryan S. Is surgery for cervical spondylotic myelopathy cost-effective? A cost-utility analysis based on data from the AOSpine North America prospective CSM study. *J Neurosurg Spine.* 2012 Sep;17(1 Suppl):89-93. doi: 10.3171/2012.6.AOSpine111069. PMID: 22985375.
- 17: Rampersaud YR, Gray R, Lewis SJ, Massicotte EM, Fehlings MG. Cost-utility analysis of posterior

minimally invasive fusion compared with conventional open fusion for lumbar spondylolisthesis. SAS J. 2011 Jun 1;5(2):29-35. doi: 10.1016/j.esas.2011.02.001. PMID: 25802665; PMCID: PMC4365621.

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Last update: **2021/08/04 00:45**

