Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act (PPACA), commonly called the Affordable Care Act (ACA) or Obamacare, is a United States federal statute enacted by President Barack Obama on March 23, 2010. Together with the Healthcare and Education Reconciliation Act amendment, it represents the most significant regulatory overhaul of the U.S. healthcare system since the passage of Medicare and Medicaid in 1965. Under the act, hospitals and primary physicians would transform their practices financially, technologically, and clinically to drive better health outcomes, lower costs, and improve their methods of distribution and accessibility.

With the recent passage of the Patient Protection and Affordable Care Act, there has been a dramatic shift toward critical analyses of quality and longitudinal assessment of subjective and objective outcomes after lumbar spine surgery. Accordingly, the emergence and routine use of real-world institutional registries have been vital to the longitudinal assessment of quality. However, prospectively obtaining longitudinal outcomes for patients at 24 months after spine surgery remains a challenge.

The aim of a study was to assess if 12-month measures of treatment effectiveness accurately predict long-term outcomes (24 months).

A nationwide, multiinstitutional, prospective spine outcomes registry was used for this study. Enrollment criteria included available demographic, surgical, and clinical outcomes data. All patients had prospectively collected outcomes measures and a minimum 2-year follow-up. Patient-reported outcomes instruments (Oswestry Disability Index [ODI], SF-36, and visual analog scale [VAS]-back pain/leg pain) were completed before surgery and then at 3, 6, 12, and 24 months after surgery. The Health Transition Index of the SF-36 was used to determine the 1- and 2-year minimum clinically important difference (MCID), and logistic regression modeling was performed to determine if achieving MCID at 1 year adequately predicted improvement and achievement of MCID at 24 months.

The study group included 969 patients: 300 patients underwent anterior lumbar interbody fusion (ALIF), 606 patients underwent transforaminal lumbar interbody fusion (TLIF), and 63 patients underwent lateral interbody fusion (LLIF). There was a significant correlation between the 12- and 24-month ODI ($r = 0.82$; $p < 0.0001$), SF-36 Physical Component Summary score ($r = 0.89$; $p < 0.0001$), VAS-back pain ($r = 0.90$; $p < 0.0001$), and VAS-leg pain ($r = 0.85$; $p < 0.0001$). For the ALIF cohort, patients achieving MCID thresholds for ODI at 12 months were 13-fold ($p < 0.0001$) more likely to achieve MCID at 24 months. Similarly, for the TLIF and LLIF cohorts, patients achieving MCID thresholds for ODI at 12 months were 13-fold and 14-fold ($p < 0.0001$) more likely to achieve MCID at 24 months. Outcome measures obtained at 12 months postoperatively are highly predictive of 24-month outcomes, independent of the surgical procedure.

In a multiinstitutional prospective study, patient-centered measures of surgical effectiveness obtained at 12 months adequately predict long-term (24-month) outcomes after lumbar spine surgery. Patients achieving MCID at 1 year were more likely to report meaningful and durable improvement at 24 months, suggesting that the 12-month time point is sufficient to identify effective versus ineffective patient care [1].

1)

Adogwa O, Elsamadicy AA, Han JL, Cheng J, Karikari I, Bagley CA. Do measures of surgical effectiveness at 1 year after lumbar spine surgery accurately predict 2-year outcomes? J Neurosurg

Spine. 2016 Dec;25(6):689-696. PubMed PMID: 26722957.