6ᵗʰ World Congress on
Spine and Spinal Disorders

December 06-07, 2021 | Dubai, UAE

Peter Fritzell

Futurum Academy for Health and Care, Sweden

The Dialogue Support, a predictive tool based on a National Spine Register in Sweden, "Swespine"
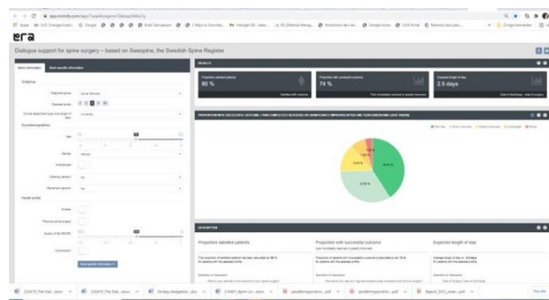
Statement of the Problem: Outcomes after surgery for spinal disorders are often uncertain on an individual level.

The purpose of this study: Patients who are surgical candidates, should, together with the profession, have access to relevant information about the possible outcome to meet expectations.

Methodology & Theoretical Orientation: Swespine is a national Swedish quality register of spine surgery, including approx. 160000 patients and approx. 10000 added yearly. The national coverage is over 95%, completeness 85% and FU after 1 year over 70%. The "Dialogue Support", based on Swespine-data, is predicting outcome, using PROM, 1 year after surgery. The prediction models have been trained on a sizable body of data for 10 years and are updated every year. The prediction is demonstrated as a proportion of a specific group achieving a certain outcome, here Global assessment ("Totally pain free-Much better-Somewhat better- Unchanged-Worse"), and gives a measure of the probability of a certain outcome for an individual with a specific baseline profile. Satisfaction is also presented. Each prediction algorithm (one per specific diagnostic group) is based on appr. 2000 - 20000 individuals. The number of observations refers to the total number of Index surgeries (the first procedure for a specific disorder) that serve as the basis for the prediction models.

Findings: Calibration plots demonstrate a high degree of concordance on a group level. On an individual level, ROC curves show moderate predictive capacity with AUC (area under the curve) values 0.67-0.68 for Global Assessment and 0.6-0.67 for Satisfaction article under revision.

Significance & Conclusion: This IRL model has no information about patients with characteristics outside the range of previously treated patients. Thus, usage of the tool must be combined with clinical judgment. The Dialogue Support has been found helpful in a clinical situation and has recently been made available on Eurospine´s Homepage.

Biography

Peter Fritzell is a Spine Surgeon and for over twenty years the Register Manager of the Swedish National Quality Spine Register, Swespine. He is engaged as a tutor and researcher at Futurum Academy in Health and Care in Jönköping, and RKC Spine Center in Stockholm, Sweden. He is an Associate Professor in Orthopaedics at Uppsala University.

e: peterfritzell@gmail.com