Numeric Pain Rating Scale (NPRS)

Measures pain intensity at rest or with activity

Phases
Pre-op
Acute
Post-acute
Active living

ICF
Body function

Time
~ 1 min to complete & score

Administration
Print version; Fillable PDF; Online version

Quality

Validity	Knee OA: Excellent correlation with NPRS & Pain VAS (r=0.94), & NPRS & verbal rating scale scores (r=0.93[1]
Reliability	*Test-retest*: Patients with MSK conditions (including hip & knee OA): Good test-retest reliability for 24-hr (r=0.63, 95% CI 0.54, 0.70) & 2-day (r=0.70, 95% CI 0.62, 0.77) recall periods.[2] Knee OA: Excellent (ICC=0.95)[1]
Responsiveness	TKA: In patients with delayed recovery 3-mos post-op, a 3-wk intensive rehab program resulted in small (Cohen's d=0.38) & moderate (0.62) effect sizes at rest & with activity, respectively.[3]
Floor/ceiling effects	No evidence found
Feasibility	Simple, quick to complete & score

Instructions

An 11-point interval scale ranging from 0 (no pain) to 10 (worse imaginable pain). Ask patient to rate pain intensity by selecting a single number on the scale. See 'Relevant Links' for detailed instructions.

Scoring: Record patient selected number

Interpretation

Direction: Lower number = less pain

SEM: Knee OA: 0.48 points[1]

MDC: Knee OA: 1.33 points[1]

MCID: TKA: <3-wks post-op: 1.5 points (small sample).[4] Chronic MSK pain (~40% with hip/knee OA): 1.0 point (15%) for "slightly better" & 2.0 points (33%) for "much better" responses. Higher baseline values (>7/10) associated with larger MCID values.[5]

Cut Points/Thresholds: No evidence found

PASS: TKA: 1.8 points at both 1 & 3 yrs[6]

Normative/ Reference values: No evidence found

Other

Key messages: Take home messages: Provisionally recommended. Simple, valid & reliable measure of unidimensional pain. Widely used, easy to administer & score but limited information regarding ability to detect change (responsiveness) for these populations. Preferred over the Pain VAS for the elderly & low literacy groups. Translated into multiple languages. In a mixed post-op population, the degree of incremental shift in NPRS pre- & post-treatment was more accurate from patient's perspective when changes converted to percentages.[7]

Relevant Links

Summary & instructions (Shirley Ryan AbilitiesLab)

References

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