Objectives: We aimed to compare measurement properties of the 5-level version of EQ-5D (EQ-5D-5L) and PROMIS-29+2 and PROMIS Global Health instruments capturing similar aspects of health. Good convergent validity was established between EQ-5D-5L and PROMIS domains capturing similar aspects of health. Mean EQ-5D-5L utilities were substantially higher than those of PROPr (0.864 vs 0.535). EQ-5D-5L utilities correlated moderately or strongly with PROPr (r = 0.61), PROMIS-GH-10 physical (r = 0.68), and mental health summary scores (r = 0.53). EQ-5D-5L utilities discriminated significantly better in 12/28 (ratio of F-statistics) and 18/26 (AUROC ratio) known groups defined by age, self-perceived health status, and self-reported physician-diagnosed health conditions.

Conclusions: This study provides comparative evidence on the measurement properties of EQ-5D-5L, PROMIS-29+2, and PROMIS-GH-10 and informs decisions about the choice of instruments in population health surveys for assessment of patients’ health and for cost-utility analyses.