HTA41

The Use of the SF-36V2® Health Survey (SF-36), SF-12V2®, and SF-6D® in Health Technology Assessments

Crowder LA[1], Lai L[2], Batchelder L[2], Carty MK[1]

[1]QualityMetric, Johnston, RI, USA; [2]IQVIA, Reading, UK

OBJECTIVES

- SF-36® and SF-12® are commonly used generic measures that provide a comprehensive assessment of HRQoL.
- The SF-6D® was designed to measure health states for the purposes of computing health utility scores.
- Little is known about how these generic HRQoL PROs are being used in health technology assessment (HTA) evaluations.
- This study aims to describe the use of SF-instruments in HTA across four therapeutic areas (TAs).

METHODS

- A systematic search of all global HTA records submitted to national and regional HTA bodies (e.g., NICE, ICER, HAS, CADTH, AEMPS, AETSA, AHRQ) between 2013-2024 for Infectious/Parasitic Disease (ID), Blood/Immune System (Blood), Skin, and Oncology therapeutic areas was conducted using IQVIA Market Access Insights platform.
- Search criteria included keywords of any generic PRO, “health technology assessment” type, and “completed” assessment status.
- Any records reporting use of one or more SF-instruments were manually reviewed to determine which score(s) were reported, statistical significance, and final recommendations from the HTA body.

RESULTS

- 1,822 (23.1%) of all HTA applications in the four TAs reported using any kind of generic PRO findings to support their application
- Of those, 246 (13.5%) included an SF-instrument (with or without another instrument, **Figure 1**), though inclusion varied by TA (e.g., 55.7% ID, 54.9% Blood, 51.2% Skin, 4.4% Oncology)
- The use of an SF-instrument exclusively also varied by TA (32.1% ID, 36.6% Blood, 1.3% Skin, 0% Oncology). For applications where SF-instruments were used, many times SF-instruments were used exclusively (57.6% ID, 67.5% Blood, 30.8% Skin, **Table**).
- 30.1% of SF-instrument scores assessed reached statistical significance in the target population (**Figure 2**)
- Across all TAs, over 65% of HTA reports where an SF-instrument was used resulted in a “Positive” or “Positive with Restrictions” recommendation (**Table**)
- A variety of conditions within these four TAs have utilized SF-instruments for HTA applications (**Figure 3**)

	Total	Positive	Positive with Restrictions	Negative	No Recommendation
Infectious Disease					
SF-Instrument(s) Included	59	25 (42.4%)	17 (28.8%)	7 (11.9%)	10 (16.9%)
SF-Instrument(s) Exclusively	34	11 (32.4%)	14 (41.2%)	3 (8.8%)	6 (17.6%)
Blood/Immune					
SF-Instrument(s) Included	77	21 (26.9%)	30 (38.5%)	15 (19.2%)	11 (14.1%)
SF-Instrument(s) Exclusively	52	13 (25.0%)	18 (34.6%)	12 (23.1%)	9 (17.3%)
Skin					
SF-Instrument(s) Included	65	23 (35.4%)	26 (40.0%)	7 (10.8%)	9 (13.8%)
SF-Instrument(s) Exclusively	20	7 (35.0%)	10 (50.0%)	1 (5.0%)	2 (10.0%)
Oncology					
SF-Instrument(s) Included	44	13 (29.5%)	18 (40.9%)	9 (20.5%)	4 (9.1%)
SF-Instrument(s) Exclusively	0	0	0	0	0

SF-Instrument(s) Exclusively denoted instances where one or more SF-instruments were used without any other PRO

CONCLUSIONS

Generic PROs, such as SF-36®, SF-12®, and SF-6D® can provide key information to stakeholders on the impact of treatment on HRQoL while also providing necessary utility scores that can be used in HTA appraisals. While generic HRQoL instruments are widely used in HTA submissions, the SF-6D® has not been as widely used, to date. SF-6D® scores can be generated from the other SF-instruments that have been more widely used.

Limitations of this study are that the search included only four TAs. Future research will expand to additional TAs and will compare the use of the SF-6D® and related instruments to the EQ-5D™ and other health utility measures.

IQVIA Market Access Insights is a proprietary IQVIA platform that allows users to identify information for various entities (molecule, therapeutic area, etc.) and provides HTA, reimbursement, clinical, regulatory, COA, pricing, and other information.

Figure 1. Frequency of SF-Instruments Used In HTA Applications, 2013-2024

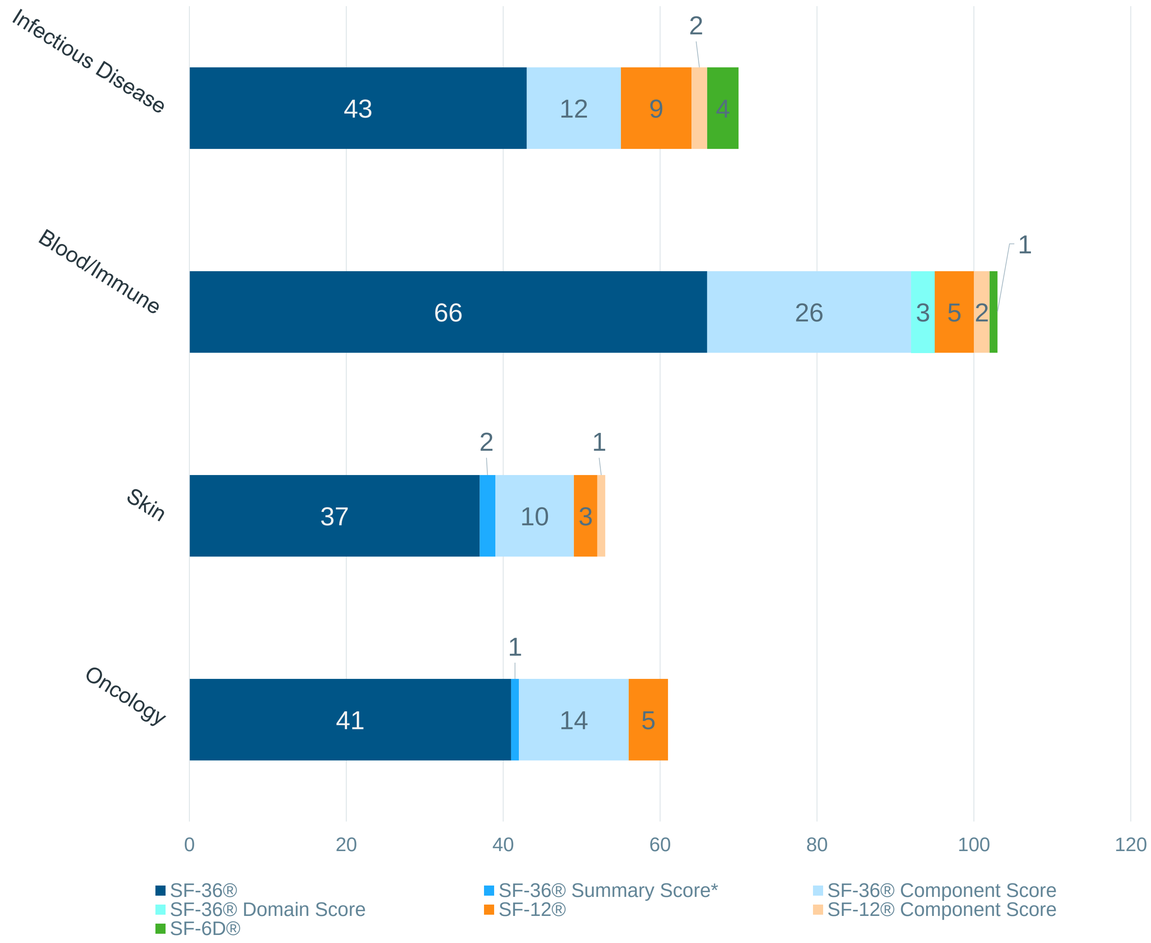

Figure 1 displays the frequency of SF-instruments reported in HTA applications from 2013-2024. Of the 246 applications including an SF-instrument, 76.0% used the SF-36®, 25.2% used a SF-36® component score, 11.0% used the SF-12® or component score, and 2.0% used the SF-6D®.

*“SF-36® Summary score” was cited in these applications, without confirmation which component summary score, or if another non-validated “summary score” was used.

Figure 2. Significance of Findings in HTA Applications Using SF-Instruments

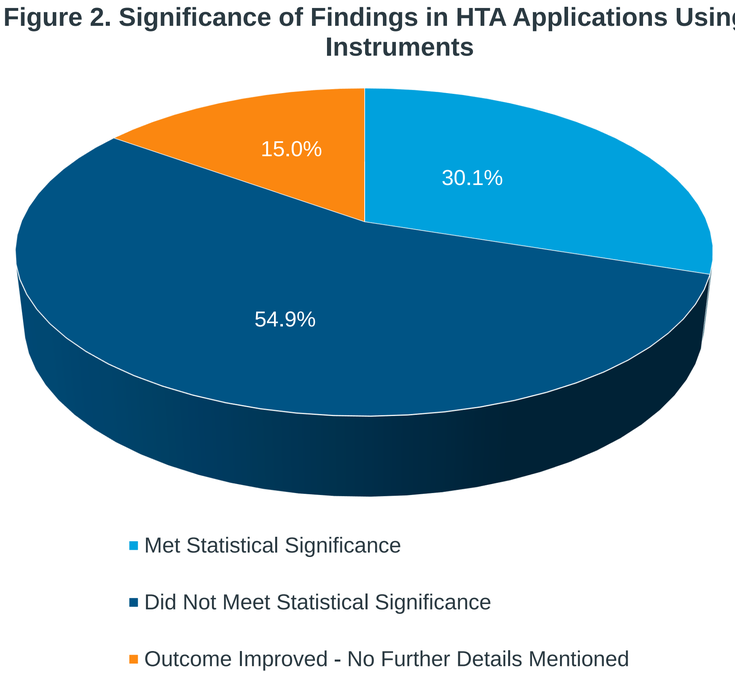

Figure 2 shows the distribution of significance of findings for those HTA applications utilizing SF-instruments. 30.1% met statistical significance, while 15.0% showed an improvement in outcome. 37.8% of HTA applications did not report statistical significance of findings.

Figure 3. SF-Instruments Used in Drug-Specific HTA Reports to NICE and ICER, 2013-2024

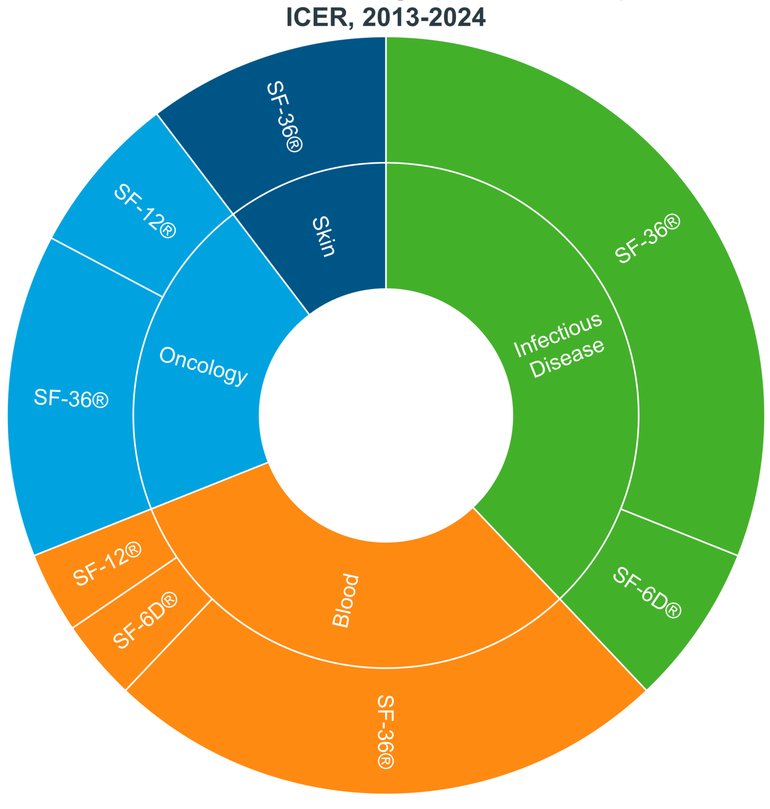

Figure 3 displays the instruments used by drug-specific HTA applications from 2013-2024, specifically evaluated by NICE and ICER. Drugs using these instruments include those to treat oncology (i.e., leukemia, lung, skin, prostate, non-solid tumors), skin (i.e., psoriasis, alopecia, psoriatic arthritis, rheumatoid arthritis), blood (i.e., anemia, sickle cell disease, thrombocytopenia, beta-thalassemia), and infectious disease (i.e., HIV-1, HCV, CMV)

Abbreviations: NICE = National Institute for Health and Care Excellence; ICER = Institute for Clinical and Economic Review; HAS = Haute Autorité de Sante; CADTH = Canadian Agency for Drugs and Technologies in Health; AEMPS = Agencia Española de Medicamentos y Productos Sanitarios; AETSA = Evaluación de Tecnologías Sanitarias de Andalucía; AHRQ = Agency for Healthcare Research and Quality