

Distinguishing Cost of Living from Quality of Life

A conceptual framework, using Singapore as an illustrative high-cost urban case

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TAKE-HOME MESSAGE

Cost of living and quality of life are related but non-redundant: their association is adequate for convergent validity and inadequate for substitution — and the household’s largest hidden adjustment, unpaid care, is measured by neither.

$r \approx 0.49$

pooled financial toxicity–HRQoL correlation¹³: ~76% of variance unshared

0 of 8

instruments record unpaid care time as a household outlay (Figure 1)

WHY THIS MATTERS

Cost of living and quality of life are routinely discussed together in policy debate, yet they measure different dimensions of household experience.

The gap. Policy nonetheless reads them interchangeably: a favourable population quality-of-life profile is taken as reassurance about affordability.

RESEARCH QUESTION

Why should these two constructs not be used interchangeably in health policy and HEOR — and what does each fail to see?

HOW THE COMPARISON WAS MADE

01 DESIGN

Conceptual comparison. No new data; no estimation.

03 HOW COVERAGE WAS CODED

Each cell coded from the instrument’s published item list: named item = covered, indirect only = partial, no matching item = absent.

Case selection. Singapore is not merely illustrative. Near-universal coverage, extensive in-kind and subsidy-based protection, mandatory medical savings, household-income means-testing and a compact urban form make it the case where the framework predicts *maximal* divergence.

02 MAPPING

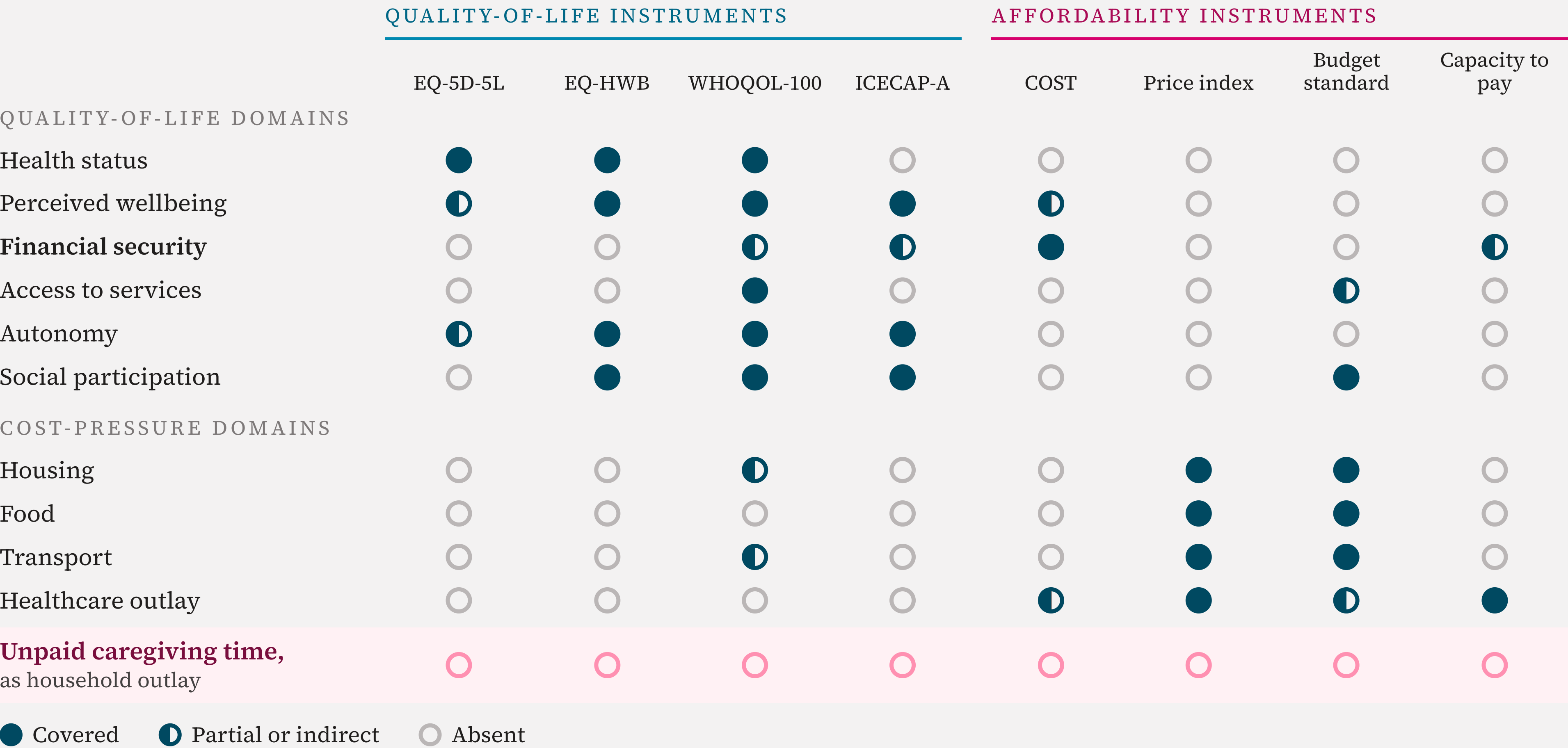
Five cost-pressure and six quality-of-life domains against the eight instruments used in HEOR.

04 OUTPUT

Three distinctions, then two propositions with falsification conditions stated.

RESULT 1 · FIGURE 1 · DOMAIN COVERAGE OF THE INSTRUMENTS IN USE

No instrument spans both referent classes — and the caregiving row is empty across the entire grid



● Covered ● Partial or indirect ○ Absent

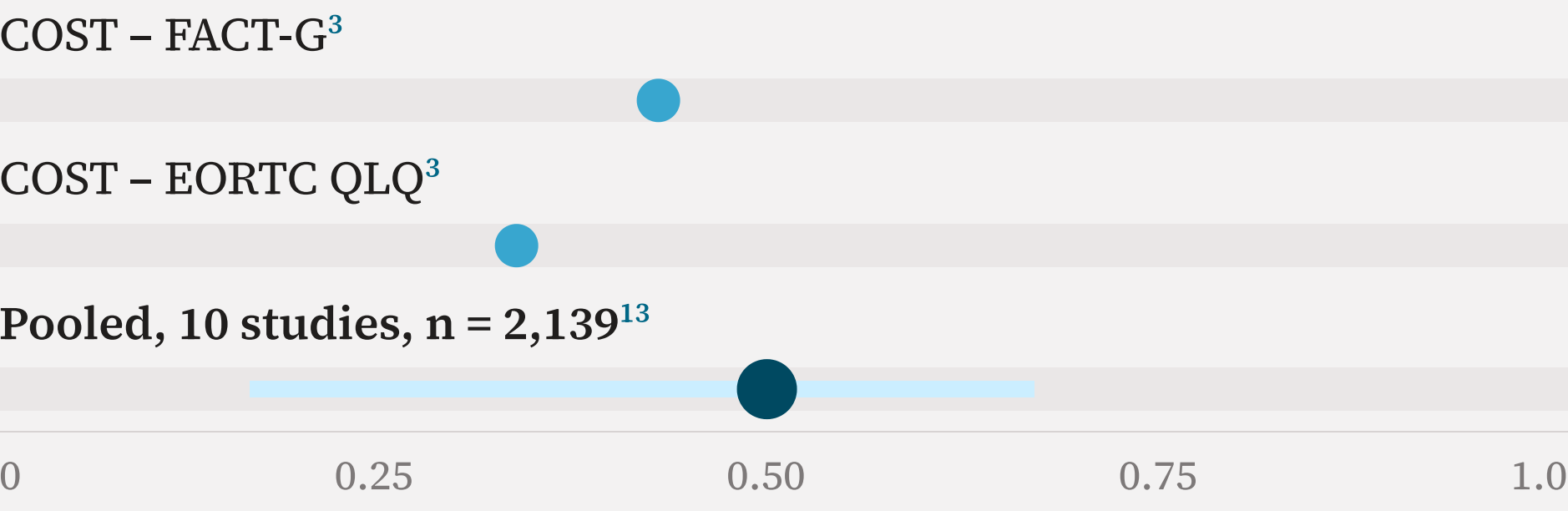
Coverage read from each instrument’s published content specification. *Covered* = the domain appears as a named item, dimension or facet. *Partial or indirect* = the domain is reachable only through a broader item or an adjacent facet and is not named in its own right. *Absent* = no item maps to the domain. Partial therefore describes the specification, not lived experience. EQ-HWB may be completed by carers, capturing carer wellbeing — but not care time as a household outlay, the row shown here.

RESULT 2 · MODERATED, NOT MECHANICAL

The association is real but loose

Higher cost of living can reduce quality of life through financial stress, delayed care and constrained choice — moderated by subsidies, insurance, savings, public services and family support.

FINANCIAL TOXICITY VS HRQOL · CORRELATION (R)



≈ 76% of the variance is unshared at $r = 0.49$ (range across domains 0.16–0.66)¹³ — adequate for convergent validity, inadequate for substitution. Policy performs substitution.

WHY THE STRAIN DOES NOT SURFACE

Subsidy is means-tested on **Per Capita Household Income** — gross household income divided by co-resident members. The schedule then plateaus¹⁰.

MONTHLY PCHI	SPEC. OUTPT.	ACUTE INPT.
≤ \$1,500	70%	80%
\$2,301 – \$3,600	50%	55%
\$3,601 – \$7,000	40%	50%
Above top threshold	30% flat	50% flat

Above the top tier, subsidy is invariant to dependent-care burden. Gross income enters the means test. Care obligation does not.

RESULT 3 · QUALITY OF LIFE CAN MASK STRAIN

Coping is invisible to both measures at once

Adaptation moves the score toward the situation

Response shift maintains reported quality of life under worsening circumstances¹⁸. Adjusting for it revealed a treatment effect a raw score had hidden: 75.0→73.2, $p = .33$, becoming $p = .016$ once corrected¹⁴.

Households run hidden margins

Among 4,055 chronically ill adults, **31% used a cost-coping strategy**: 22% cut necessities, 18% underused medication, 16% took on debt⁶. Debt predicts forgone care net of income and net worth⁸.

Forgoing care registers as protection

“...cannot afford to use health services and therefore report very low or no health spending. As a result, these individuals will often be included amongst those considered to be protected against financial catastrophe.”

Moreno-Serra, Millett & Smith 2011¹¹

THE OUTLAY NOTHING PRICES

33h a week, provided by primary informal caregivers to older adults

An imputed **\$S15,959 a year** each, roughly **\$S1.28 billion** nationally for seniors 75 and over¹.

No transaction, so no price index records it. Where caregiver wellbeing *is* measured, it is the carer’s health state recorded, not care time as a household outlay.

P1 Divergence is greatest where protection is strongest

Cost-of-living indices price a reference basket at market rates. Where the state provides in kind, public provision substitutes for market purchase but the basket does not adjust — so index and household diverge by construction.

Falsifiable by: cross-system comparison of cost-to-affordability divergence against in-kind provision share.

WHAT THE MAP SHOWS

No instrument spans both referent classes. The two measurement systems occupy disjoint regions; neither can substitute for the other, because neither sees what the other sees.

Financial security appears only as perception (WHOQOL) or as experienced toxicity (COST) — never in a QALY-generating instrument, and never as material capacity. EQ-5D-5L has no financial, material or social-participation content⁷; the EQ-HWB, built to extend the QALY into social care, has no financial domain at all². Only the WELLBY internalises income⁵.

The caregiving row is empty across the grid. Unpaid care generates no transaction, so price indices miss it; the burden falls on someone other than the person measured, so quality-of-life instruments miss it too.

TWO REFERENTS, TWO THINGS MEASURED

Cost of living	External price and provision environment (<i>place</i>)
Affordability	The household’s position relative to it (<i>household</i>)
Quality of life	Experienced state (<i>individual</i>)
HRQoL	Experienced <i>health</i> state; a subset of QoL and the input to the QALY ⁹

An external measure cannot register how a household experiences constraint; an internal one cannot register what the constraint is. **Moderate correlation is the expected result, not an anomaly.**

ILLUSTRATIVE CASE · SINGAPORE

The two measures disagree in the same city

COST OF LIVING

1st

EIU Worldwide Cost of Living 2023, joint first with Zurich⁴

5th vs >25th

Same index family: expatriates vs ordinary residents¹²

+48%

Monthly household health spending, 2018→2023¹⁷

QUALITY OF LIFE

0.933

Mean EQ-5D-5L index, $n = 2,005^{20}$

54.6%

Reporting full health (11111)²⁰

Yet **58.6% of Singaporeans aged 57–76 are moderately to extremely worried about affording medical services** — the highest-ranked concern of any category. ROSA / SMU Singapore Life Panel, $n = 6,839^{15}$

Illustrative juxtaposition, not a comparison: independent samples, different years, different constructs. It motivates the framework; it does not test it.

WHAT THIS MEANS

P2 The two blind spots point the same way

Adaptation attenuates the fall in measured quality of life for a coping household¹⁸; forgone care lowers that same household’s measured expenditure⁸. One behaviour triggers both, so both point toward “*this household is fine*.” Compounding errors, not offsetting: if both fail together, the second recovers nobody the first missed.

Falsifiable by: testing whether response shift and forgone care are uncorrelated within households. The two literatures have not been joined.

IN PRACTICE

Report affordability alongside HRQoL rather than inferring either from the other. Treat a favourable quality-of-life profile as **compatible with** — not evidence against — affordability strain.

HEOR already handles this axis separately — extended CEA¹⁹ and the catastrophic-expenditure tradition²¹.

CONCLUSION

A population can look healthy and still be under affordability strain. The financial dimension is structurally absent from the instruments that generate QALYs^{2,7,9} — by design, not by necessity — so affordability must be measured, not inferred.

STRENGTHS

Coverage claims traceable to published content specifications; each proposition stated with the evidence that would refute it; the case selected where the framework predicts most divergence, not least.

LIMITATIONS

A conceptual paper: the propositions are not tested here. Meta-analytic response-shift effect sizes are small and partly cancelling¹⁶ — the argument rests on the mechanism, not its magnitude. The Singapore figures are illustrative, not inferential.

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