

Equal Value of Life Years Gained (evLYG)

What is the evLYG?

- The Equal Value of Life Years Gained or evLYG is a measure developed by the Institute for Clinical and Economic Review (ICER) in 2018 to address the criticism that the quality-adjusted life year (QALY) devalues a year lived with disability.
- The evLYG values additional life years gained – or survival – from use of treatment without consideration for quality of life. In those years before survival benefits, quality-of-life gains are accounted just like the QALY. During life years added due to survival with treatment, quality-of-life gains do not count - just life years gained.
- Like the QALY, the evLYG aims to provide a standardized measure for comparing the value of life years gained across different diseases.

How is evLYG different?

- Both the QALY and evLYG are subject to criticism that the measure of quality-of-life improvements for the years a patient was expected to live prior to treatment are discriminatory.
- Unlike the QALY, the evLYG focuses solely on life years gained without any consideration for quality of life improvements, fully disregarding any improvements in quality of life during additional years of life gained from treatment.
- If two treatments extend life equally, but one offers meaningful improvements in quality of life like reduced pain, the evLYG for the two treatments will still be the same.

How does evLYG measure up?

- The evLYG is considered a simplistic fix attempting to address criticism that the QALY devalues life years lived with a disability. Yet it fails to account for oversimplified measures of quality-of-life gains in expected life years (not extended life years), nor does it account for any health improvements in extended life years.
- While evLYG attempts to measure baseline quality of life (during the years that a patient was expected to live prior to receiving treatment) it does so in a limited way that fails to capture the full spectrum of patient experiences, preferences, and benefits – both direct and indirect – that treatments may have on improving a patient’s quality of life.
- The evLYG’s reliance on average estimates based on generic survey data does not account for important differences in patients’ clinical needs and preferences, particularly those with complex diseases and from underrepresented communities.
- Furthermore, there may be challenges in obtaining accurate and reliable evLYG estimates across different diseases and populations. Limited availability, data quality issues, and inconsistencies when comparing different diseases can hinder its application.
- The evLYG does not fully address the discriminatory aspects of the QALY. It assumes that people value life year gains more than quality of life improvements, giving a lower value

to health interventions in patient populations that have a lower life expectancy or fewer life years gained from treatment, which may include people with disabilities, underlying chronic conditions, the elderly, and certain communities of color.

Who is using evLYG?

- As its creator, ICER uses evLYG in its assessments, alongside the QALY.
- In the 2023 Inflation Reduction Act revised guidance, evLYG was listed as a methodology to be evaluated to determine if it violates the law's patient protections and can be used by the government to evaluate the value of certain pharmaceuticals.

What are they saying?

- ISPOR detailed ICER's integration of evLYG in their 2020-2023 Value Assessment Framework and the role evLYG plays in ICER's new health technology assessments: *"In general, treatments with greater life extension and where the quality of life of surviving patients is low will see the greatest potential benefit from the evLY metric compared to the QALY metric. This would potentially include certain treatments for cancer (particularly those affecting younger patients) and gene therapies for debilitating, deadly diseases, while diseases where treatments only, or primarily, improve quality of life (e.g., migraine, depression among cancer patients) will see minimal or no benefit."*
- The National Disability Council referenced evLYG in its 2022 policy brief on "Alternatives to QALY-Based Cost-Effectiveness Analysis for Determining the Value of Prescription Drugs and Other Health Interventions": *"evLYG system still relies on health utility weights to measure quality of life improvements, despite the fact such measures are typically derived from general survey data and do not account for the complexity of the preferences and experiences of people with disabilities."*
- The ALS Association submitted a public comment to ICER regarding the application of evLYG, arguing that it fails to capture variation in patient preferences based on disease severity: *"Compared to QALYs, evLYG, with its focus on life years, presents an even more unitary measure of patient and societal value. evLYG does not adequately measure the value of quality of life and disease therapies."*
- Paulden, Sampson, et al., note "Logical Inconsistencies in the Health Years in Total and Equal Value of Life-Years Gained": *"We find that the HYT and evLYG approaches can result in logical inconsistencies...the evLYG can produce an unstable ranking of treatment options. We recommend that policy makers exercise caution and avoid adopting any approaches that violate fundamental principles of rational decision making or that rely upon assumptions that lack credibility."*