

The QALY: Rewarding the Care That Most Improves Patients' Lives

Clinicians play a vital role in helping individual patients decide what treatment is best for them. Cost-effectiveness analysis looks at evidence for entire patient populations, comparing the health benefits and economic costs of different treatment options. These analyses are one tool to support broader efforts by governments, private insurers and drug manufacturers to make more transparent, evidence-based coverage policies and pricing decisions. The goal of cost-effectiveness analysis is to help inform policy that will ensure **truly transformative treatments are rewarded handsomely, while neither patients nor society pays too much for care that doesn't offer patients significant benefit.**

The Best Measure of Improved Outcomes for Patients

The Quality-Adjusted Life Year (QALY) is the gold standard for measuring how well a medical treatment improves and lengthens patients' lives, and therefore has served as a fundamental component of cost-effectiveness analyses in the U.S. and around the world for more than 30 years.

Creating Incentives to Treat Serious Illness

Because the QALY records the **degree to which a treatment improves patients' lives**, treatments for people with serious disability or illness have the greatest opportunity to demonstrate more QALYs gained and justify a high price. For this reason, ICER has found many innovative and expensive new treatments are highly cost-effective, including:

- ✓ CAR-T for childhood leukemia at \$475,000/treatment
- ✓ Emicizumab for hemophilia at \$450,000/year
- ✓ Personalized lung cancer drugs at \$90,000/year

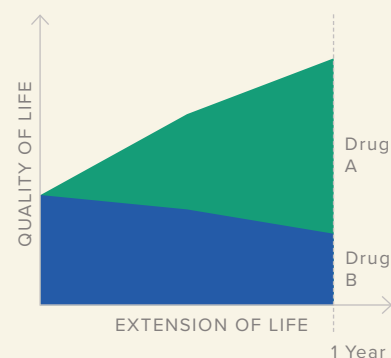
Ensuring Fair Drug Prices, Supporting Better Access

The current drug pricing and insurance system does not work well for patients. The QALY can help. Analyses using the QALY, when embedded in a process guided by patient input and subject to full public discussion, can inform judgments on a fair price of a new treatment. Drugs that make a real difference in patients' lives can be priced accordingly, while lower prices are sought for less-effective treatments. Ultimately, a fair price makes sure that innovative treatments get their due reward, patients and insurers save money when it could be put to better use elsewhere, and patients reap the benefits of broader access to more affordable health care.

HOW THE QALY WORKS

On average, Drugs A & B both extend the lives of patients for one year, but Drug B has severe side effects.

Clinically superior, Drug A is credited with more QALYs gained and, many would argue, deserves a higher price.



I have an incurable blood cancer and rely on pharmaceutical innovation to stay alive. ICER's independent cost-effectiveness analysis—built on the QALY—is one useful input to help us think through what a fair price would be. ICER works to ensure drugs are priced according to the value they bring to patients, which helps us get affordable access to the care we need.”

**David Mitchell, President and Founder,
Patients For Affordable Drugs**

Ensuring All Years of Life Are Valued Equally

Concerns have been raised that the use of the QALY could undervalue potential treatments that extend the length of life without improving quality of life for conditions associated with serious illness or chronic disability. This scenario is unlikely and presents little risk of any substantial impact on cost-effectiveness. However, the QALY should always be viewed in a broad context, and to be responsive to these concerns, ICER will highlight an element in our reports that provides policymakers with information that weighs extension of life expectancy equally across all conditions.

The evLYG

ICER's future reports will incorporate more prominently a calculation of the Equal Value of Life Years Gained (evLYG), which evenly measures **any** gains in length of life, regardless of the treatment's ability to improve patients' quality of life.

In other words, if a treatment adds a year of life to a vulnerable patient population – whether treating individuals with cancer, multiple sclerosis, diabetes, epilepsy, or a severe lifelong disability – that treatment will receive the same evLYG as a different treatment that adds a year of life for healthier members of the community.

Supplementing the QALY, Not Replacing It

To maintain the ability of cost-effectiveness analyses to reflect the full benefits that treatments may have on quality of life, ICER will continue to calculate each treatment's QALY gained. The cost per QALY gained remains the best way for policymakers to understand how well the price of a treatment lines up with its benefits and risks for patients.

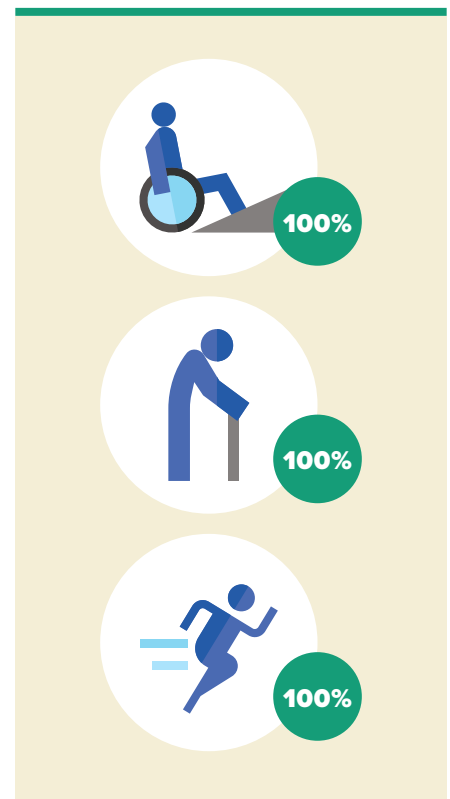
By understanding a treatment's cost per evLYG, as well as its traditional cost per QALY, policymakers can take a broader view of cost-effectiveness and be reassured that they are considering information that poses no risk of discrimination against any patient group. If ICER's analysis finds a major difference in these two measures, we will include specific language in our report describing the underlying characteristics of the treatment and the condition that lead to the difference.

The QALY remains the gold standard in cost-effectiveness analyses for many reasons, and a systematic departure from using the QALY would risk undervaluing treatments that improve the quality of life more than other alternatives for that condition. By drawing greater attention to the analysis of a treatment's evLYG, however, ICER hopes to provide peace of mind to concerned patients and policymakers, while furthering the ability of cost-effectiveness analysis to support explicit, transparent discussions in the U.S. on how best to align a drug's price with its benefits for patients.

ICER'S COMMITMENT TO EQUALITY

ICER's cost-effectiveness assessments compare therapies on their ability to improve quality of life and lengthen life. All reports also will highlight information that values any extension of life **exactly the same** across all diseases, regardless of the patient population's age, severity of illness, or level of disability.

WITH evLYG, ONE ADDED YEAR = ONE ADDED YEAR



ICER welcomes broad stakeholder input on the QALY and the evLYG as we update our value assessment framework in 2019.